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Regional Fare Coordination System

RFCS Ad Hoc Report Operations Manual

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1 Introduction

This document provides details on how to use the Crystal Reports Explorer™ (CRE) online application to create ad hoc reports using data collected within the Central Puget Sound Regional Fare Coordination System (RFCS).

This manual is used in the Report Operations Module of RFCS training, which presumes knowledge of the RFCS and relevant Agency policies and procedures.

2   Reporting Overview

The reporting system contains reports as defined within SEA-00833 RFCS Reporting Requirements (DR 111). The reports are divided into the following sections:

- ERG Service Bureau Call Center Metrics

- Website Performance

- Financial Management

- General Management

- Institutional

- Card Management

- System Maintenance

- Mail Center

- National Transit Database (NTD)

- Common Ridership and Revenue

Each report within these sections is generated using specific data source. These data sources are available from within Crystal Reports Explorer™ in order to perform user-specific ad hoc reporting.

Also, additional data sources are available that were designed specifically for ad hoc reporting needs. These data sources are not used by any existing standard report already available on the Crystal Enterprise™ (CE) system.

2.1   Reporting Architecture

The RFCS has a common architecture for data access, reporting, and information delivery. The RFCS that is integrated with CE is built on a scalable multi-tier report processing architecture as illustrated in Figure 1. The circled area indicates where reports are generated.
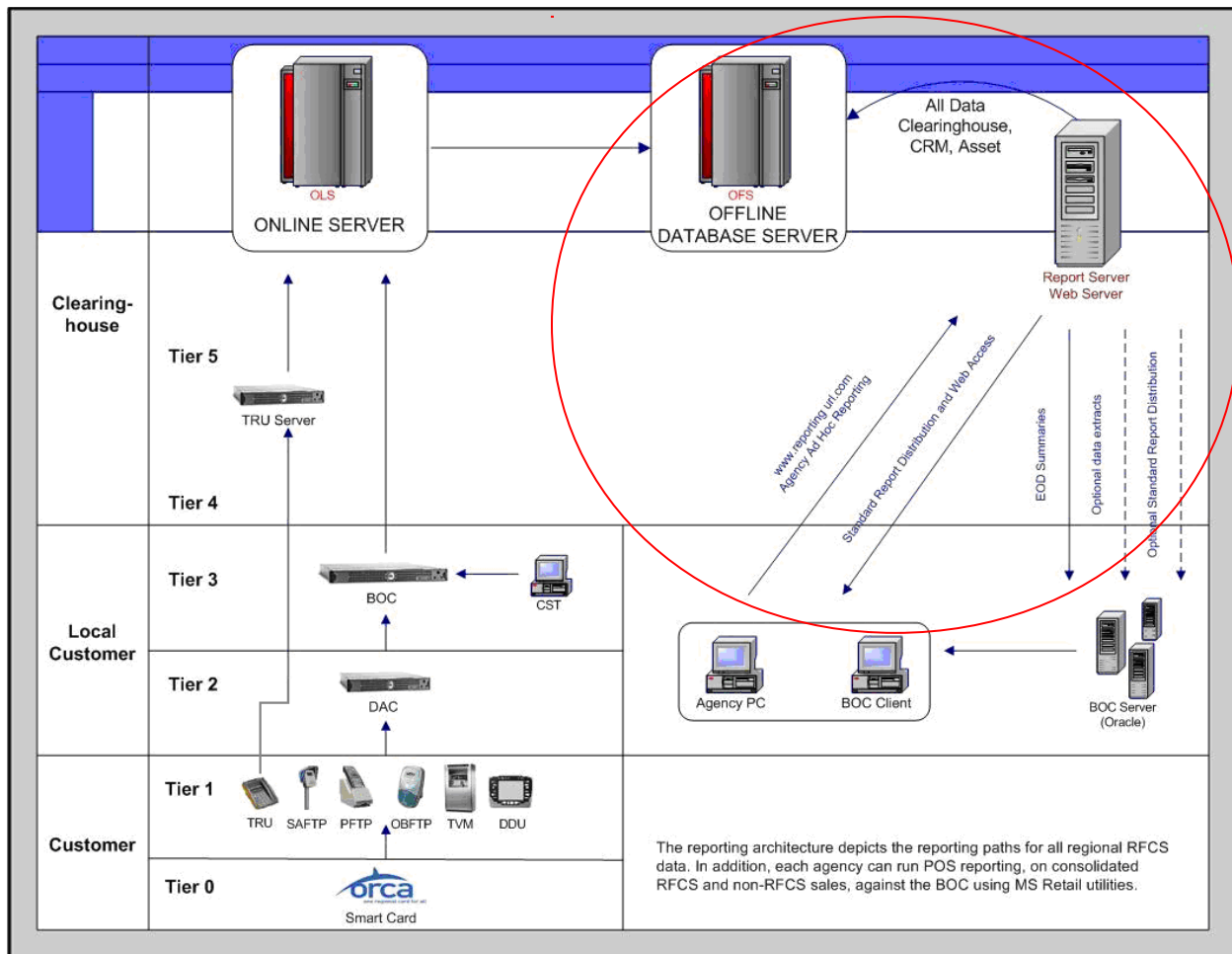
Figure 1: RFC System Reporting Architecture

2.2   RFCS Reporting Components

Table 1 identifies the products used within the reporting infrastructure.

Table 1. RFCS Reporting Components

Component	Product
Report Server	Oracle
Reporting Engine	Business Objects Crystal Enterprise™
Reporting Template Creation	Business Objects Crystal Reports™
Reports Archive	Business Objects Crystal Enterprise™ + File System
Standard Report Views	Business Objects Crystal Enterprise™ Business View Manager
Standard Report Creation	Business Objects Crystal Reports™
Ad Hoc Report Creation	Business Objects Crystal Reports Explorer™

2.3   Reporting Roles and Security

Every person who accesses standard or ad hoc reports has an associated user ID and logon for the CE system. This user ID is assigned specific roles that in turn determine the level of security to be associated with that user.

All administration and changes of user IDs are handled by the ERG Service Bureau (ESB).

The roles relevant to reporting functions (including standard report development) are shown in Table 2.

Table 2. Roles for Reporting Functions

Role	Associated Access Rights
AgencyAdhoc	Crystal Reports Explorer to generate ad hoc reports
ARM	reports specific to the Automatic Revalue Manager
CardManagement	standard card management objects
CustomerService	standard customer service and website related objects
ESB	ESB customer service objects
Finance	standard financial objects
FiscalAgent	standard fiscal agent financial objects
GeneralManagement	standard general management objects
Institutional	standard Institutional objects
LeadAgent	objects specific to Lead Agencies
MailCenter	objects specific to the mail center
NTD	standard NTD objects
Ridership	standard ridership objects
SystemMaintenance	standard system maintenance objects

3 Using Crystal Reports Explorer™

Crystal Reports Explorer allows users to create and modify reports, design layouts, and perform data analysis using a zero client interface. This functionality reduces IT reporting backlog by enabling users to create, save, and redistribute personalized report views in Crystal Enterprise.

3.1 Logging On

To use Crystal Reports Explorer, you must ensure that you have a user name and password that is recognized by Crystal Enterprise. If you are unsure of your account information, or if your account is not recognized by the system, contact RFCS.

There are multiple ways to access the Crystal Reports Explorer Ad Hoc tool:

1. "Adhoc Reporting" hyperlink within Crystal Enterprise

2. "New Report" link from within Crystal Enterprise

3. Bookmark the CRE URL for direct logon

3.1.1 Hyperlink from within CE

The first method is by accessing the "Create Adhoc Report" hyperlink from within the Crystal Enterprise online reporting system (see Figure 2).

4. When logged on to CE, there will be a folder on the main "Home" level called "Adhoc Reporting." Select this folder to expand and view its objects.

5. Select the "Create Adhoc Report" hyperlink to access the logon window for Crystal Reports Explorer.
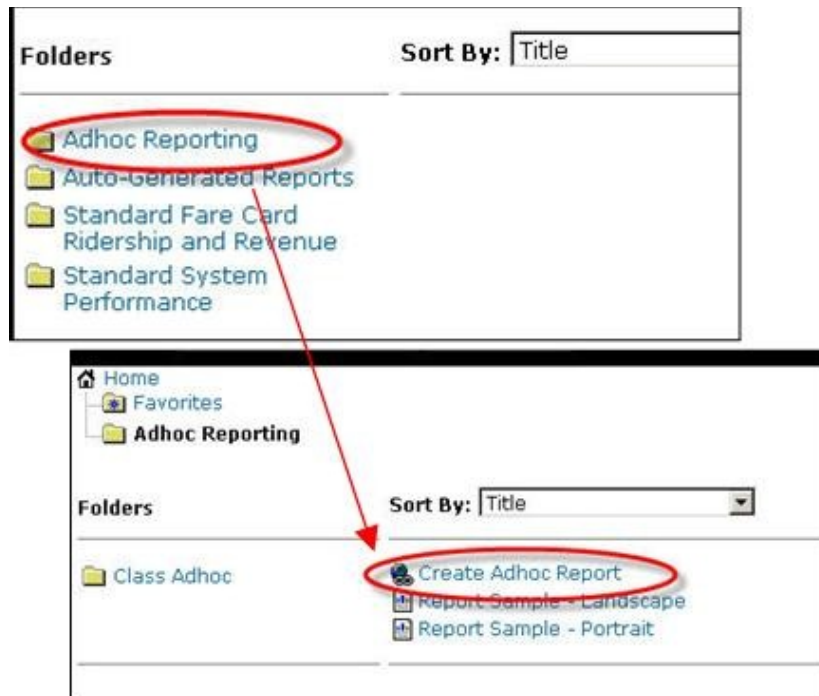
Figure 2: Hyperlink access to Crystal Reports Explorer

3.1.2   New Report link from within CE

The second method is by using the "New Report" link within Crystal Enterprise (Figure 3).

The "New Report" link is located in the upper right corner of Crystal Enterprise.

Select the link to launch Crystal Reports Explorer.

Note: When using this method, you are NOT required to log on to CRE. Your username and password are passed from Crystal Enterprise.
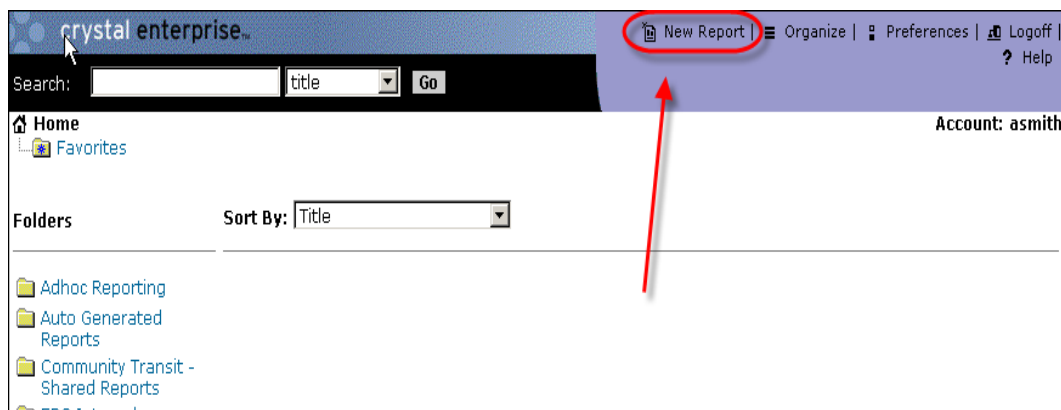
Figure 3: New Report link access to Crystal Reports Explorer

3.1.3   Bookmark URL for direct logon

You can also bookmark the URL of the Crystal Reports Explorer login page (when accessed using the hyperlink within CE) in order to bypass logging in to Crystal Enterprise (Figure 4).
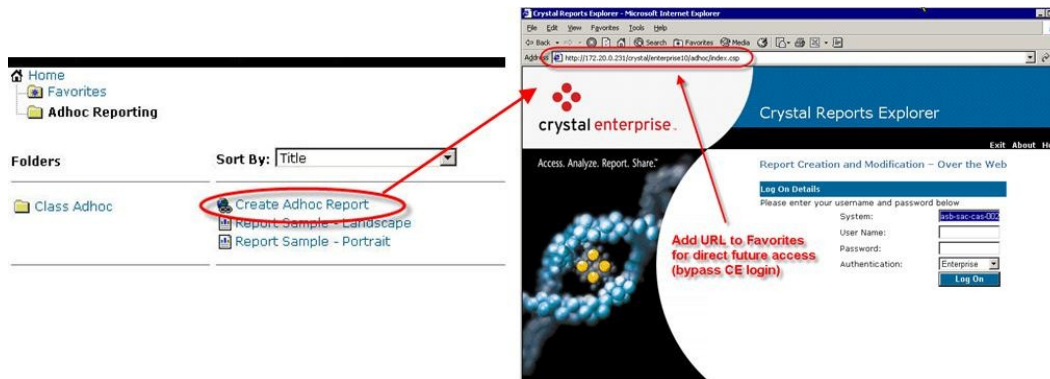
Figure 4: Bookmark URL for direct access to Crystal Reports Explorer

Note: It is important to remember you will be working with a web-based program, which can be slower to respond that a program installed on your own computer. Try to exercise patience. After you click, wait for the program to register. (Often the program refreshes after each click.)

Do not double-click. Single click unless double-click is required (A double-click could cause a lock-up or delay in the process of opening).

Do not use the browser's "BACK" button. This may not undo changes. It is best to manually modify any errors or to "RESTART" from the main window.

3.2   Logging Off

When you are finished working in CRE, it is recommended that you log off rather than just closing the browser. If you do not log off and/or there is no activity within a preset amount of time (20 minutes), you will automatically be logged off. Logging off immediately simply ensures that another user cannot access the reporting system if you walk away from your workstation within 20 minutes.

Note: Clicking the **Close** button at the top right of a browser to close the active window does NOT log you off the CE system.

3.3   Crystal Reports Explorer™

Once you come to the logon page of Crystal Reports Explorer, you will find the credentials on the window as shown in Figure 5.

Note: If you accessed Crystal Reports Explorer through the New Report link, you will bypass this logon page and the Welcome Window in the next section.
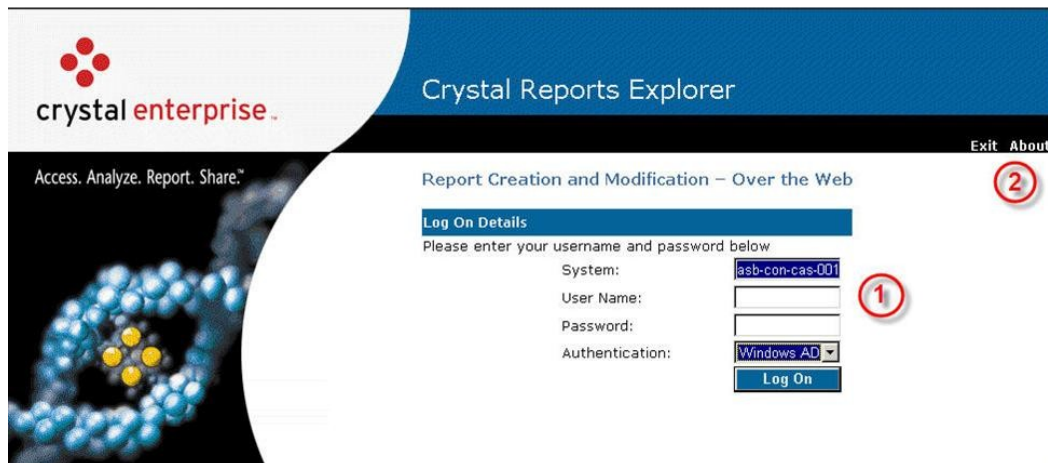
Figure 5: Log on details of Crystal Reports Explorer.

The tabs of the logon credentials are:

- **System –** Identifies the server in which the program will run (Populated by default, do not alter).

- **User Name –** Enter your username assigned by ESB (Same username used to access Crystal Enterprise).

- **Password –** Enter your password.

- **Authentication –** Please be sure to select Windows AD if not already populated from the drop down menu.

- **Exit –** Closes the logon window.

- **About –** Display information about Crystal Reports Explorer with links to Business Objects information.

3.3.1   Welcome Window

Based on the security settings and options chosen to access Crystal Reports Explorer, one of the two windows appears.

This window will display the option to create a report. "Log Off," "About," and "Help" links are also shown in Figure 6.

Figure 6: Welcome window of Crystal Reports Explorer.

This window also appears after "Create Report" is selected from the welcome window of the Crystal Reports Explorer.

3.3.2   Main Page

Figure 7 shows the Main page of Crystal Reports Explorer.
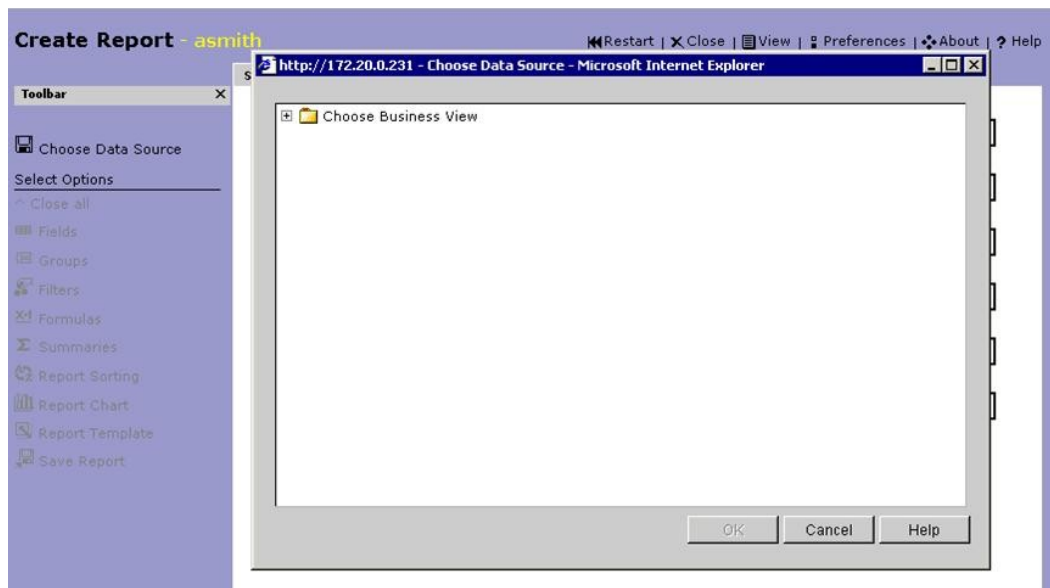
Figure 7: Main page of Crystal Reports Explorer

This page provides access to all the reporting tools that are available to you. When the program is initially launched, the **Data Source** window is opened by default. The various tools are accessible through a number of toolbar options, control buttons, and tabs, as shown in Figure 8.

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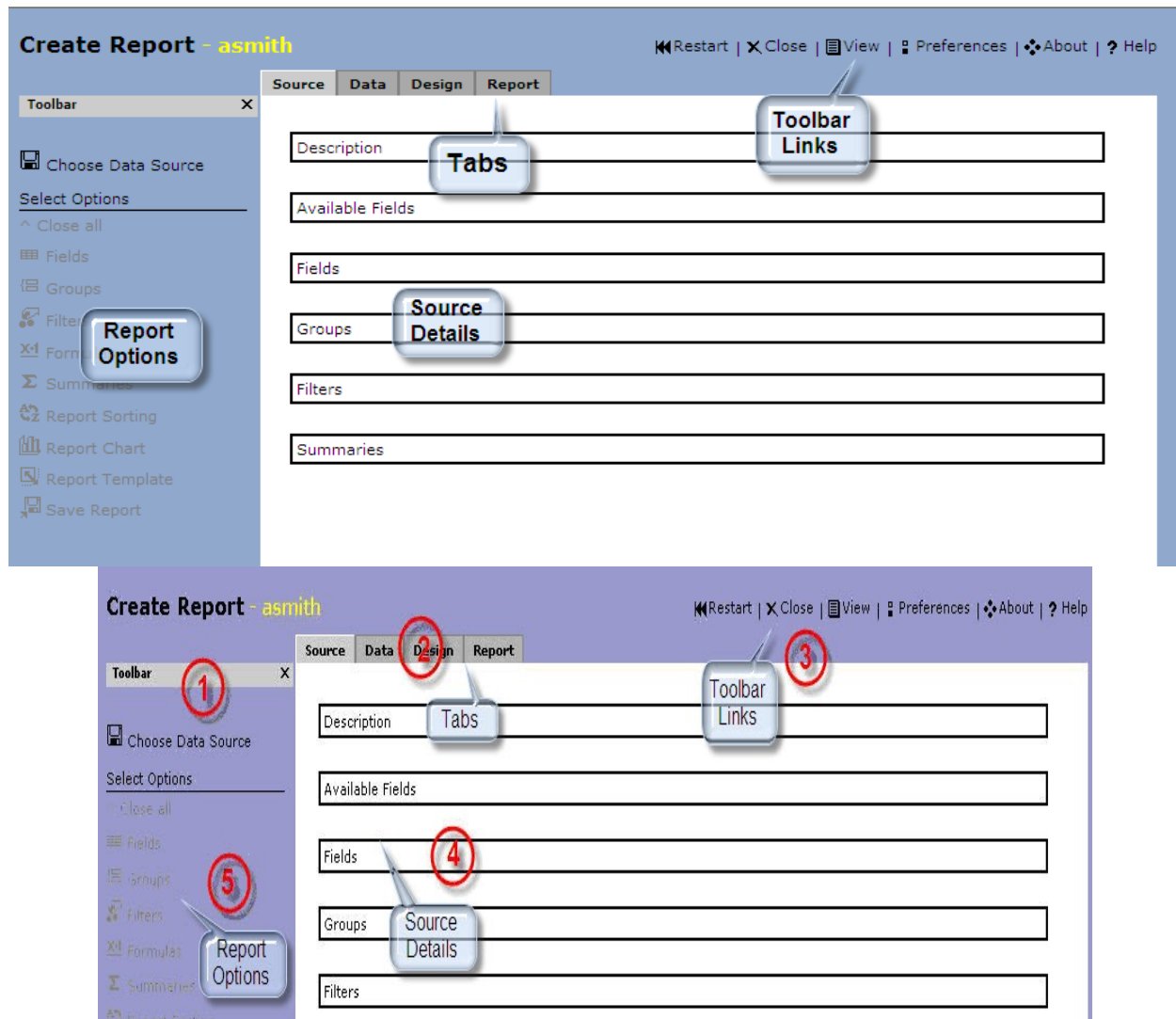
Figure 8: Toolbar options, Controls and Tabs in Crystal Reports Explorer Main Page.

3.3.2.1   Tabs

The Main page displays the Source tab by default. The other tabs include Data, Design, and Report. Figure 9 shows the available tabs.
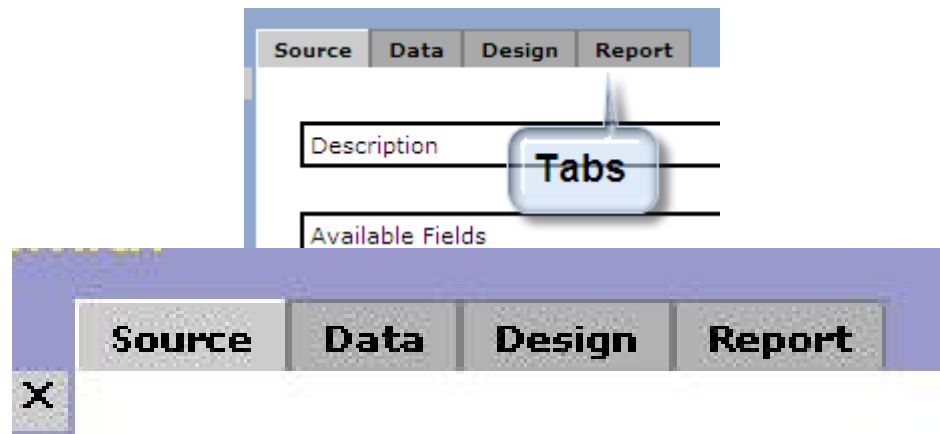
Figure 9: View of the tabs available in Crystal Reports Explorer main page.

- **Source** – As you work through the options on the toolbar, use the fields on this tab to keep track of the objects that you are working with. For instance, when you select a data source, additional information may appear in the Description field. Also, the list of fields in the data source appears in the Available Fields field. This tab displays the summary information regarding the current report.

- **Data** – Click this tab to view the data in a plain grid without formatting. This grid provides the easiest way for you to preview the raw data as you modify and refine your report by adding groups, filters, summaries, calculations, and so on. The data can be exported from this view.

- **Design** – Click this tab to view and modify the layout and formatting of your report. Here you can move and format field objects, add text objects, rearrange and format report sections, and so on.

- **Report** – Click this tab to view your Crystal report. It displays the report at a given point of time if run from Crystal Enterprise. You can switch back and forth between the Design tab and the Report tab as you complete the final formatted report.

3.3.2.2   Toolbar Links

Use the links on the top-right corner of your screen (as shown in Figure 10) to navigate.

- **Restart** – Click to restart the report design or modification process from the selected data source. It removes all the fields, summaries, etc. from the tabs.

- **Close** – Click to close the current report without saving changes. Takes the user back to the main screen. (The user will be prompted for confirmation to close; all the work will be lost.)

- **View** – Click to open the report viewer in a new window. It has the same functionality as a Report tab except that the Report tab opens report in its own window.

- **Preferences** – Click to set the user preferences (will apply to the current user only).
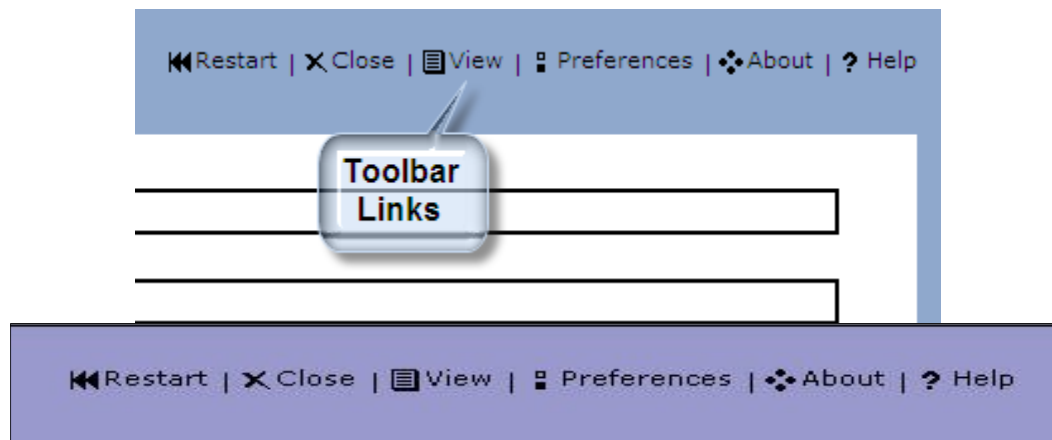
Figure 10: Toolbar links in Crystal Reports Explorer main page

o   In the Preferences - Application tab, the user can change the background colors, the default tab, toolbar visibility, and other options as desired as shown in Figure 11.
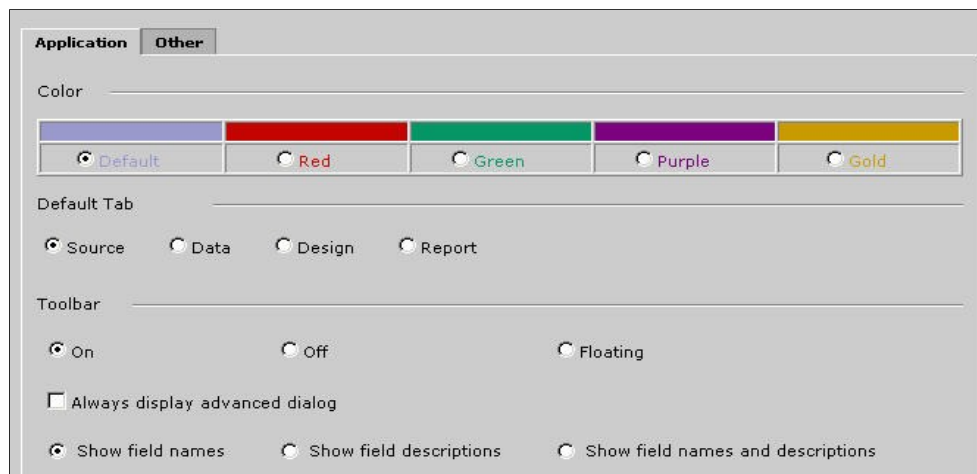
Figure 11: Application tab of preferences links in Crystal Reports Explorer main page.

o   In the preferences – Other tab as shown in Figure 12, the user can apply a default template to all reports, specify the batch value of the data grid, and specify design tab settings. The number of rows per batch applies to how the Data tab presents the viewable data; default setting is 50 rows per page. Increasing this number may result in longer wait time to view data using the data tab.
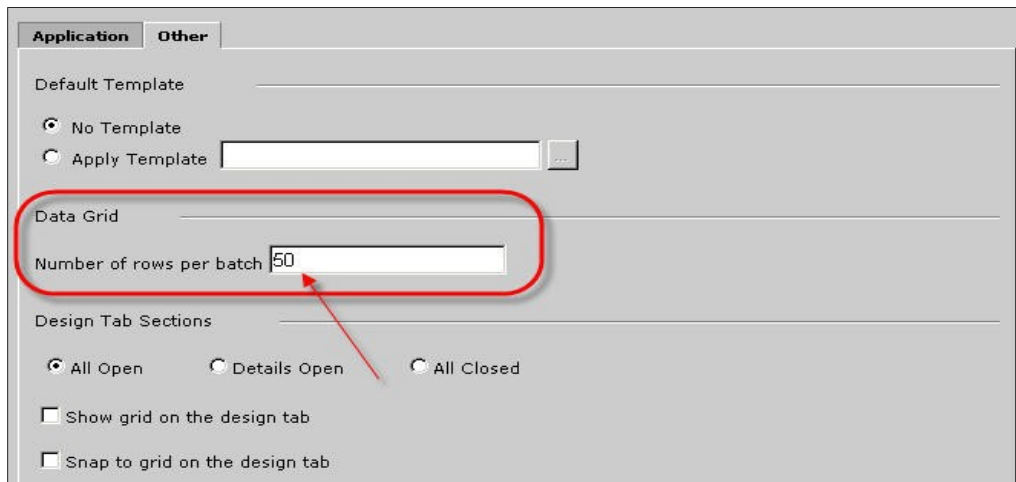
Figure 12: Other tab of preferences links in Crystal Reports main page.

- **About** – Click for information on the current Crystal Enterprise Explorer product release.

- **Help** – Click to access the online guide for Crystal Reports Explorer. Opens a new window showing the help topic that is relevant to where the user was at the time help was selected. The user can maneuver through the help system using contents hierarchy or the index tabs displayed on the left, as shown in Figure 13.

Note: If the Contents/Index pane is not visible, scrolling to the bottom of the Help window will display a link in which the user can turn on the Contents/Index pane.
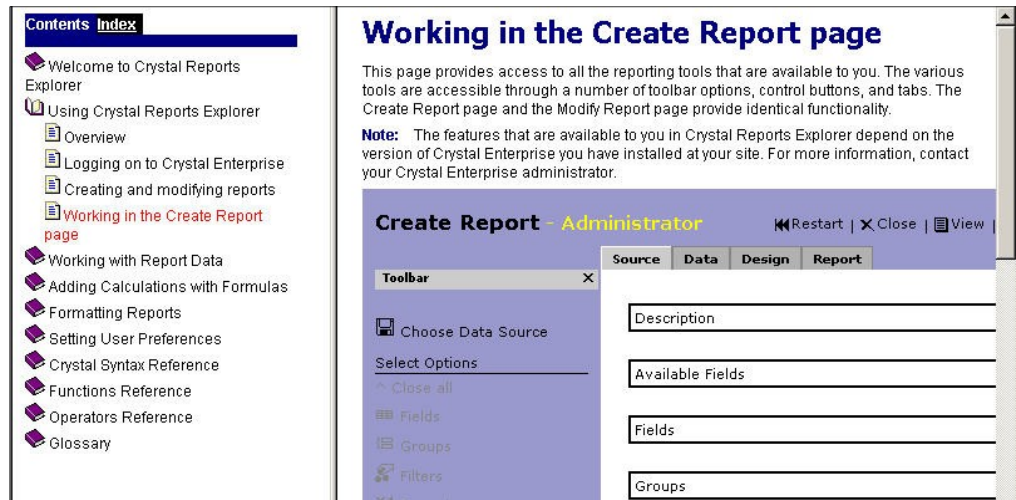
Figure 13: Help window in Crystal Reports Explorer main page.

3.3.2.3   Source Details

The Source tab includes a summary of everything chosen for an ad hoc report, as shown in Figure 14.

Figure 14: Details of Source tab.

- **Description** – Populated if the report is saved to Crystal Enterprise (Optional).

- **Available Fields** – Lists all the available fields based on the data source chosen.

- **Fields** – Lists all the fields that will appear in the report results – Data tab (Not necessarily Design tab).

- **Groups** – Shows all groups that have been created.

- **Filters** – Lists all filters being applied to the data source.

- **Summaries** – Lists all summaries added to the report results.

3.3.2.4   Report Options

Usually the report options are unavailable (i.e., "grayed out") until a data source is picked up by the user. Report options are shown in Figure 15.
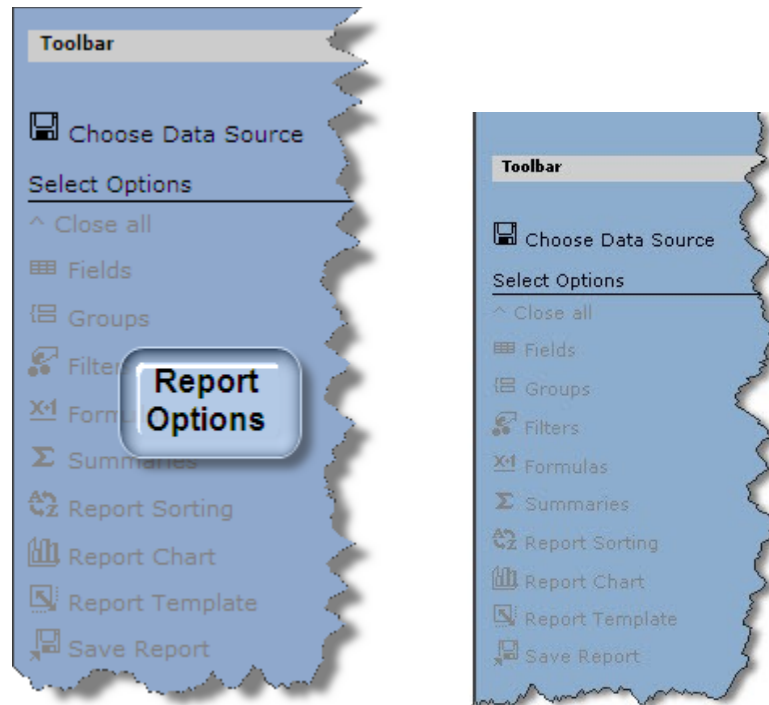
Figure 15: Ad hoc report select options.

- **Close All** – Minimizes all options that may be expanded.

- **Fields** – Select fields to display on the report.

- **Groups** – Create group levels within the report.

- **Filters** – Define filters used for report results.

- **Formulas** – Create formulas using data source.

- **Summaries** – Include summaries for any groups or a grand total.

- **Report Sorting** – Apply sorting to result data set.

- **Report Chart** – To Include a chart within your report.

- **Report Template** – Select an existing report template to apply to report.

- **Save Report** – Saves the report to the Crystal Enterprise server where it can be accessed / viewed by other users.

3.3.3   Choose Data Source

The first step in creating an ad hoc report requires the user to select a data source. Normally when the program is first launched, the Choose Data Source window will appear. At any time, the user can re-open the Choose Data Source window or select a different data source (which will restart the report design) by clicking the Choose Data Source link on the left as shown in Figure 16.
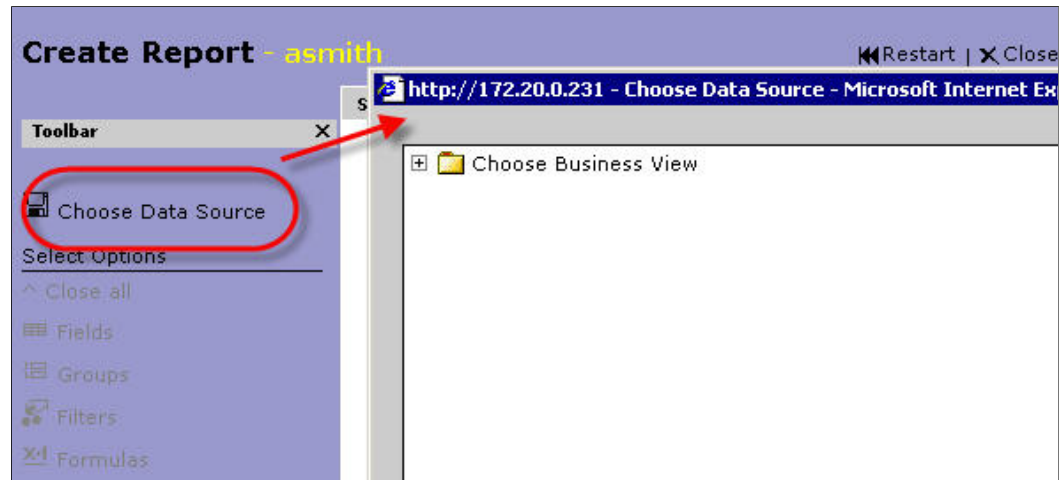
Figure 16: Choose data source link on the Crystal Reports Explorer.

3.3.3.1   Choose Report Data Source

There are two ways an Ad hoc report can be sourced. Using an existing standard report's data sourcebusiness views or business views created specifically for ad hoc purposes.

Using an existing report data source expand the "choose Report Data SourceORCA Project Seattle" folder as shown in Figure 17. All business views that source the standard reports are listed herewithin the "Standard Report Business Views" folder. Double-click the desired view or select it once and click **OK**.
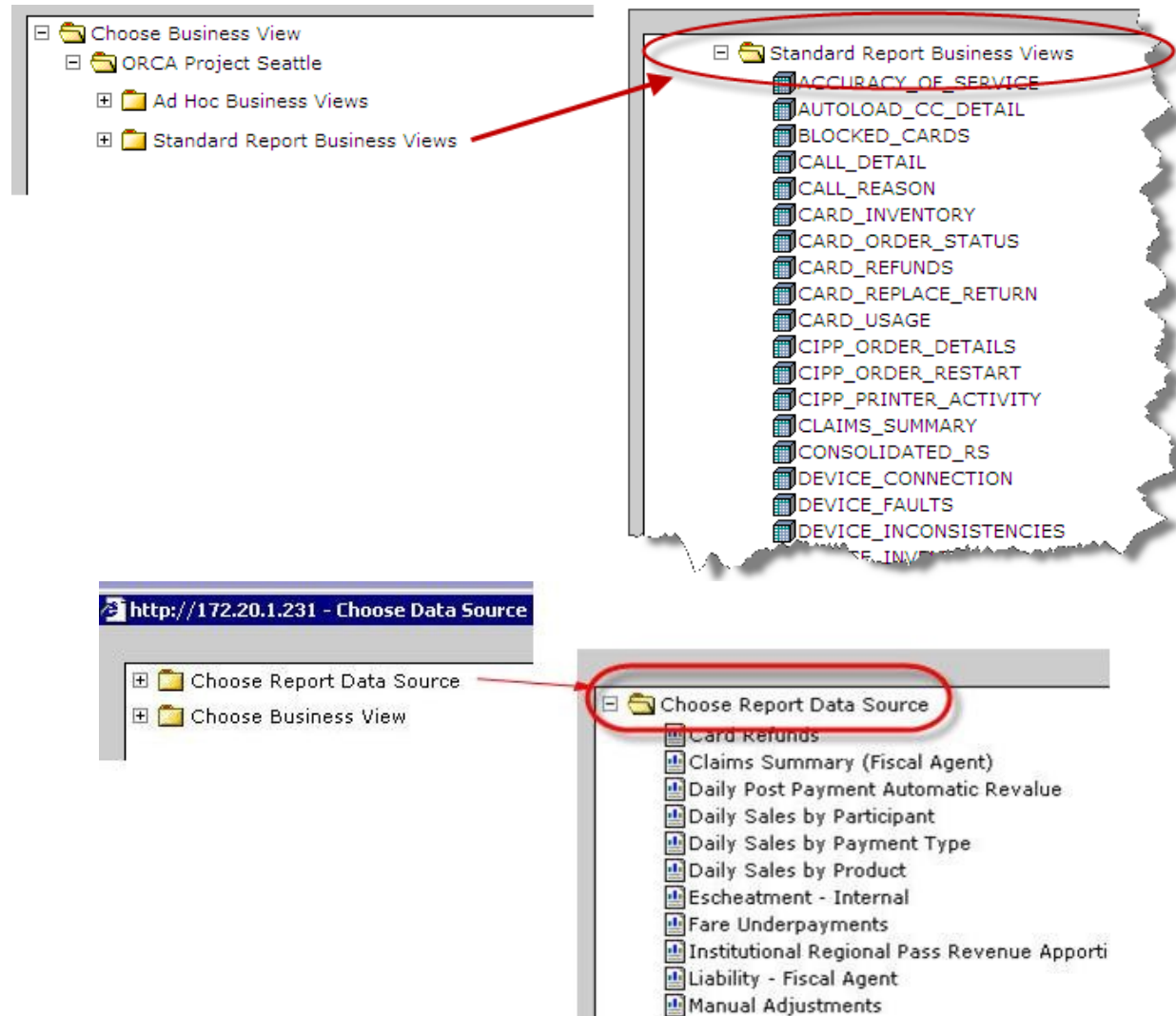
Figure 17: Choosing data source from Choose Report Data Source option.

3.3.3.2   Choose Business View

To use a business view created specifically for ad hoc reporting (often contains much more data than report data sources), expand the "Choose Business ViewORCA Project Seattle" folder and also expandthen the "Ad hoc Business Views" folder. All views are grouped into the type of data that they contain. Expand the appropriate data type folder. Double-click or select and click **OK** to select the business view as shown in Figure 18.
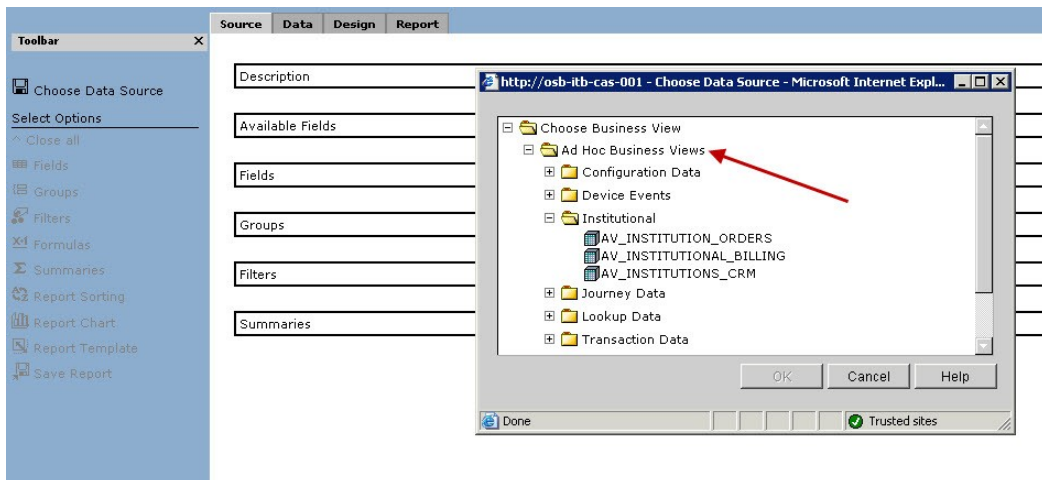
Figure 18: List of Business Views available for Ad hoc reporting.

3.3.4 Fields

Once the data source is selected either from "Choose Report Data Source" or "Choose Business View," the fields are listed in the Source tab of Crystal Reports Explorer.

3.3.4.1 Available Fields

Options are now available to be performed against the data source (options not yet available will remain gray) as shown in Figure 19.
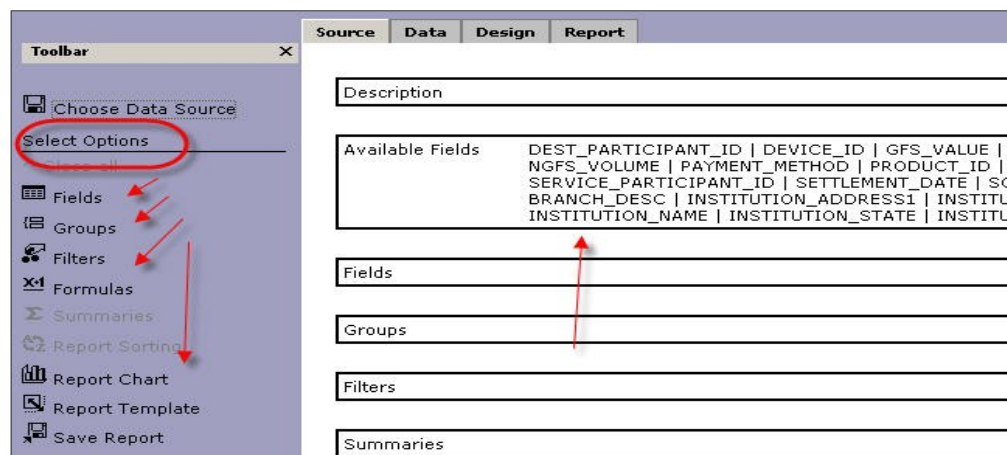
Figure 19: Available fields after choosing the data source.

3.3.4.2 Adding Simple Field

Expand the field option link by clicking **Fields**. A small window appears listing all available fields in the data source. Click on a single field and wait for the screen to refresh. The field will now have an asterisk * next to it to indicate that the field is used in the report. The field name will appear in the Fields section of the Source tab as shown in Figure 20.
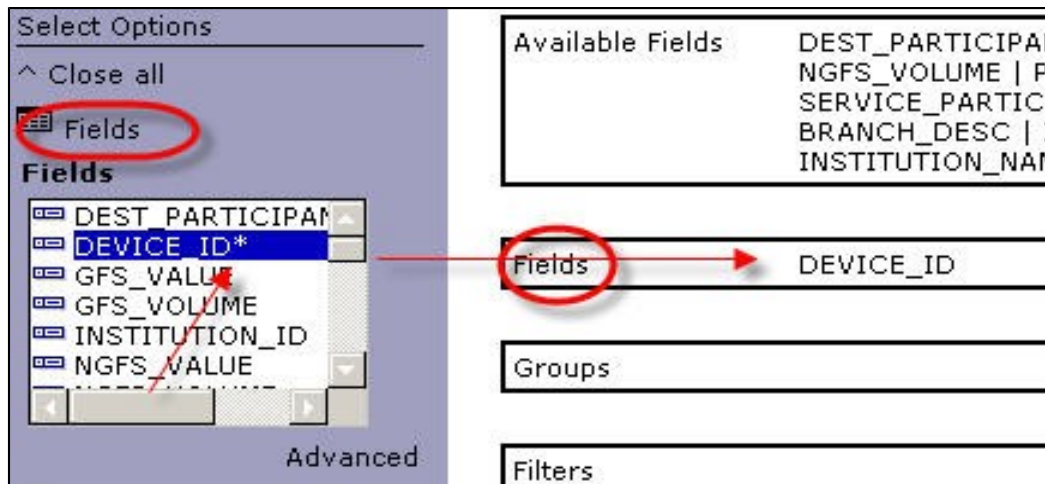
Figure 20: Adding simple field to the Ad hoc report.

3.3.4.3   Add Field – Advanced Options

The **Advanced** option for adding fields is available at the bottom of the Select Options tab. The available options inside the advanced menu are shown in Figure 21, and are described below.

6. **Available Fields** – This lists the available fields after a user chooses the data source from either of the two options, its nothing but available fields option.

7. **Fields to Display** – This part of the advanced field option lists the available fields to be display in the report.

8. **Add / Remove fields** – A user can add fields from the fields to display in the report by clicking the first ">" button. By clicking ">>" button the user can add all the fields into the report. To remove single or all the fields together from the report user needs to click one of these two "<", "<<" buttons.

9. **Change field order** – As described in section 3.3.4.3.1.

10. **Browse Data** – Click to view the data stored within the field.

11. **Find Field** – As described in section 3.3.4.3.2.

12. **Rename** – As described in section 3.3.4.3.3.
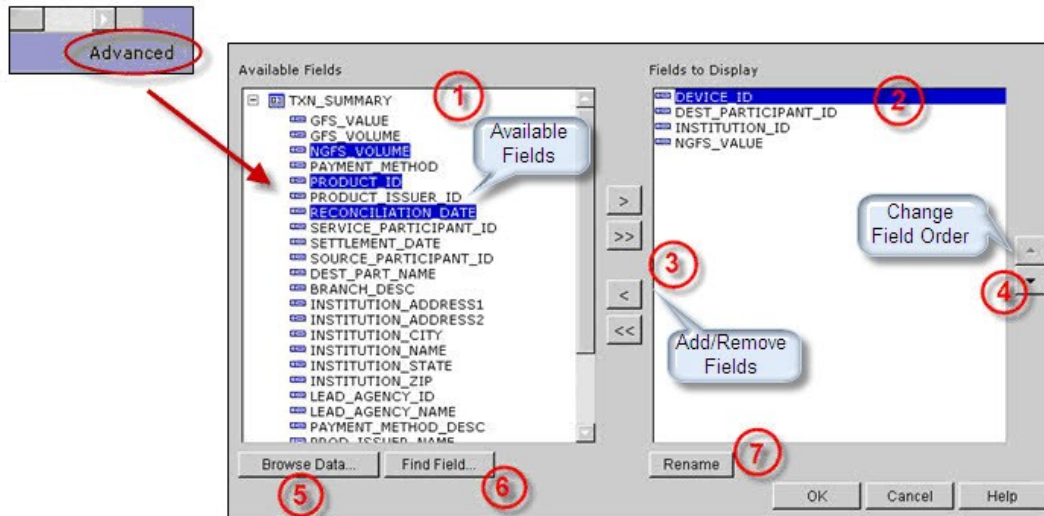
Figure 21: Advanced options under Add Field in the Source options.

3.3.4.3.1   Change Field Order

In **Fields to Display**, the order from top to bottom is how fields will appear in the Data tab and on the initial report design from left to right. To change the order, select the field to move, and choose the up or down arrow as shown in Figure 22.
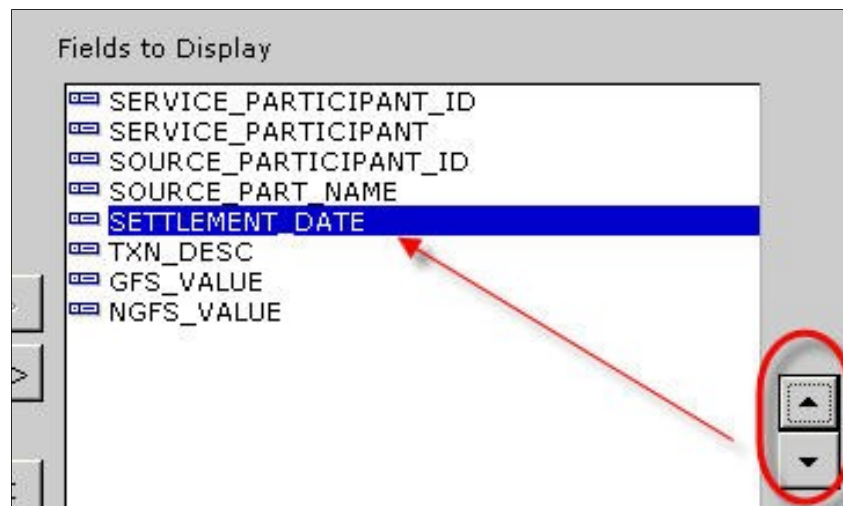
Figure 22: Change field order option in the advanced options.

3.3.4.3.2   Find Field

If the data source has a long list of available fields, you can click **Find Field…** to search for a specific field. The field name must be an EXACT text match; no wildcards accepted. If a matching field is found, the window will jump to that field and highlight it as shown in Figure 23.
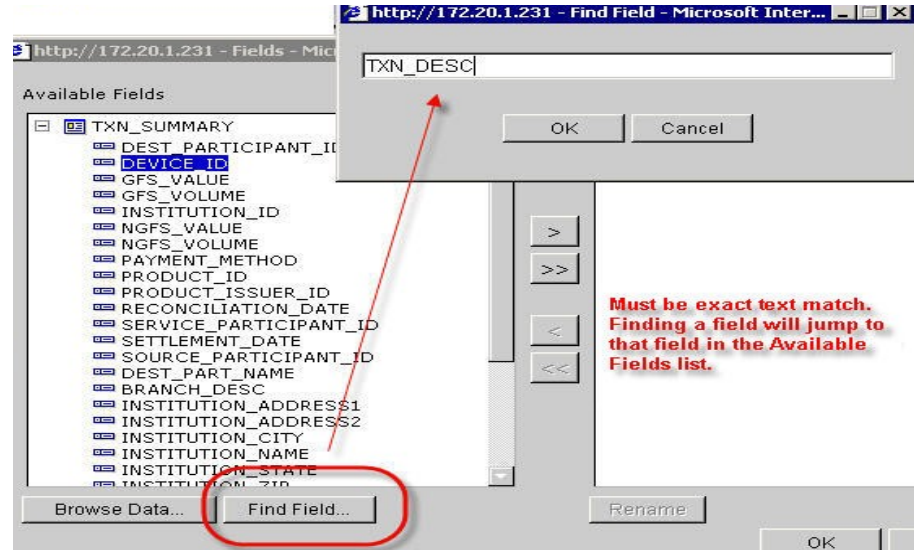
Figure 23: Find field option in the advanced options of add field.

3.3.4.3.3   Rename Field

Select the field from the **Available Fields** list and add it to **Fields to Display**. Highlight the field in the **Fields to Display** list and click **Rename**. A text box will appear prompting the user for the new field name. When a user changes the field name, it is changed only for this report; it is not changed in the data source. Figure 24 shows the procedure to rename a field to be displayed in the report.
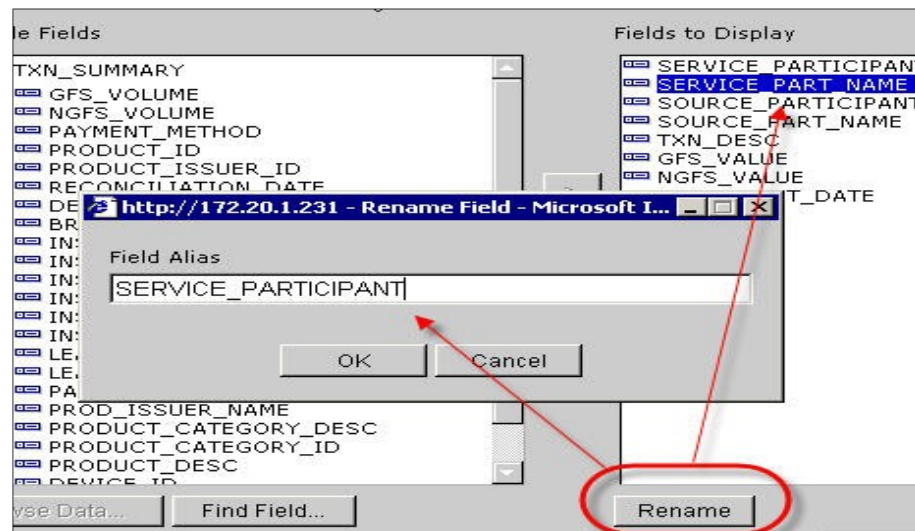
Figure 24: Rename a field name in Ad hoc report.

3.3.5   Groups

Grouped data is that data which is sorted and broken up into meaningful groups for summary purposes. Group order is important. If no summaries are needed, consider sorting records by field value instead. Example of a grouped data by date and product is shown in Figure 25. The left report is grouped by date and then by product in ascending sort order and the report in the right is grouped by product and then by date in ascending sort order.

Figure 25: Data in a report grouped by date and product.

3.3.5.1   Create Simple Group

Groups are created for summary purposes. Group order is always important. The difference can be seen in Figure 25. Simple groups can be created by selecting a field in the list box. The field name will be added to the Source summary window in the groups section of the source tab. An asterisk will appear next to a grouped field indicating that the group is added in the report. Figure 26 shows the process of creating a group.
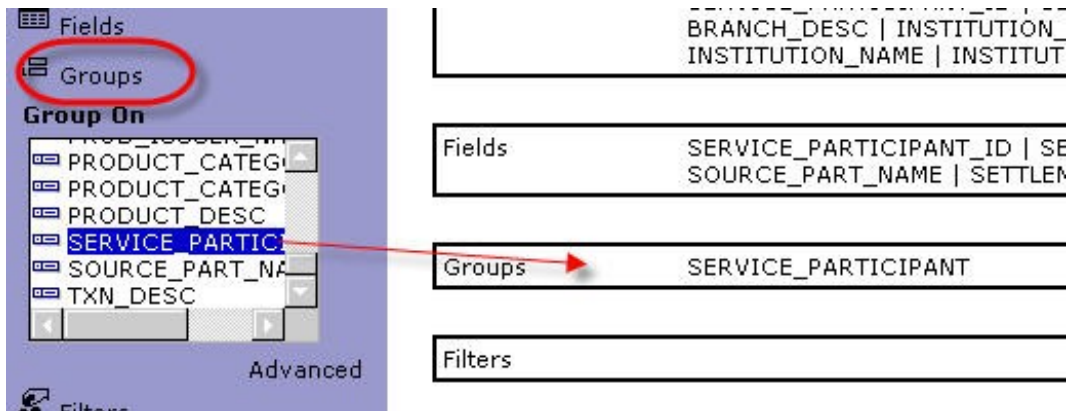
Figure 26: Creating Group in Ad hoc report.

3.3.5.2   Create Group – Advanced Options

Groups can also be created in the report using the Advanced tab below the Groups tab in select options. Ensure that you are choosing the correct field by browsing the data using browse data option. Then find the specific field you want to perform grouping. The user can add or remove available fields to or from a group on the field list by clicking the arrow buttons in the middle. Once the list of groups is added into the report, their order can be changed using the up/down arrows on the far right-hand side as shown in Figure 27.
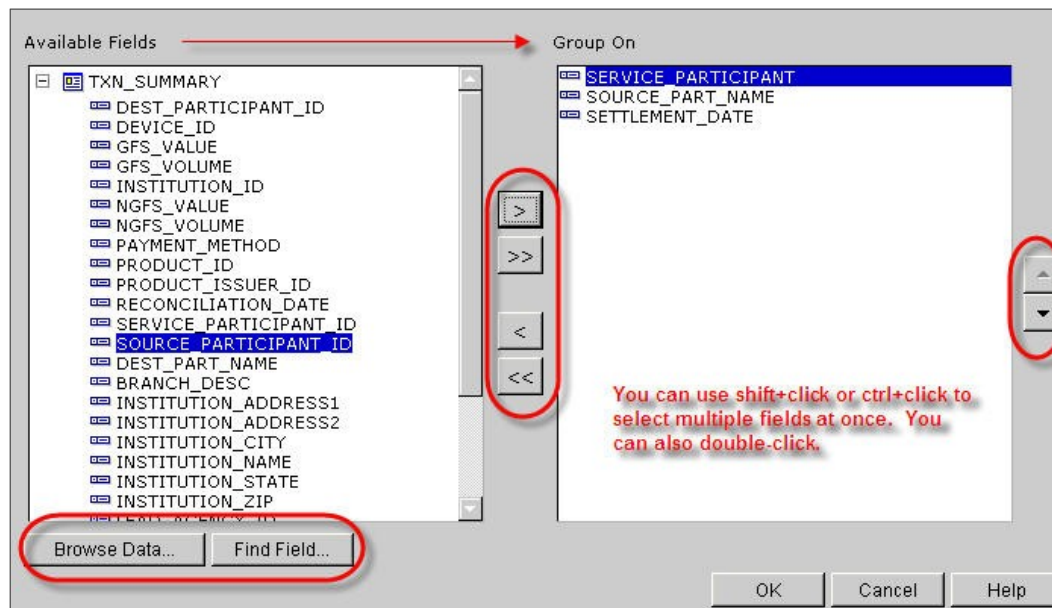
Figure 27: Creating groups in the Ad hoc report using advanced options.

3.3.6   Filters

A user can use a filter to limit the number of records that are retrieved from the data source. Filters not only remove the unwanted or unnecessary data from your report, but they also improve the speed with which the report is processed. A filter consists of two main parts: the filter field and the filter condition.

The filter field is the data source field whose values are assessed in order to determine whether or not each available record belongs in the result set. For example, you might filter a report field called Puget Pass type to display pass type sold for a value of $1.50 or more. In this case, the filter field is the amount sold.

The filter condition provides the rule that allows Crystal Enterprise to determine whether or not a particular record belongs in the result set. The filter condition consists of filter type (a comparison or pattern operator) and filter value. The filter type specifies the comparison that you are interested in and the filter value defines the value against which the actual data source field values are compared. The result set includes only those records whose value in the filter field meets the filter condition set by the user.

3.3.6.1 Create Simple Filter

Clicking the **Filters** link displays the simple filter boxes. Choose the field to filter on (drop-down list will display all available fields based on data source). Select a comparison operator:

- (=) equal to

- (<) less than

- (>) greater than

- (<>) not equal to

- (<=) less than or equal to

- (>=) greater than or equal to

Enter a value, or browse for a value (click the browse icon) as shown in Figure 28. Add the filter to apply to the data source.

If a valid value for comparison is unknown, then the browse icon may help. Click the browse icon to open a new window displaying some of the values in the database, based on the **Filter On** field. Highlight the desired value (if present) and click the **OK** button. The value highlighted will appear in the text box. Once the filter is created, select the **Add** link to apply to the desired field in the Ad hoc report.
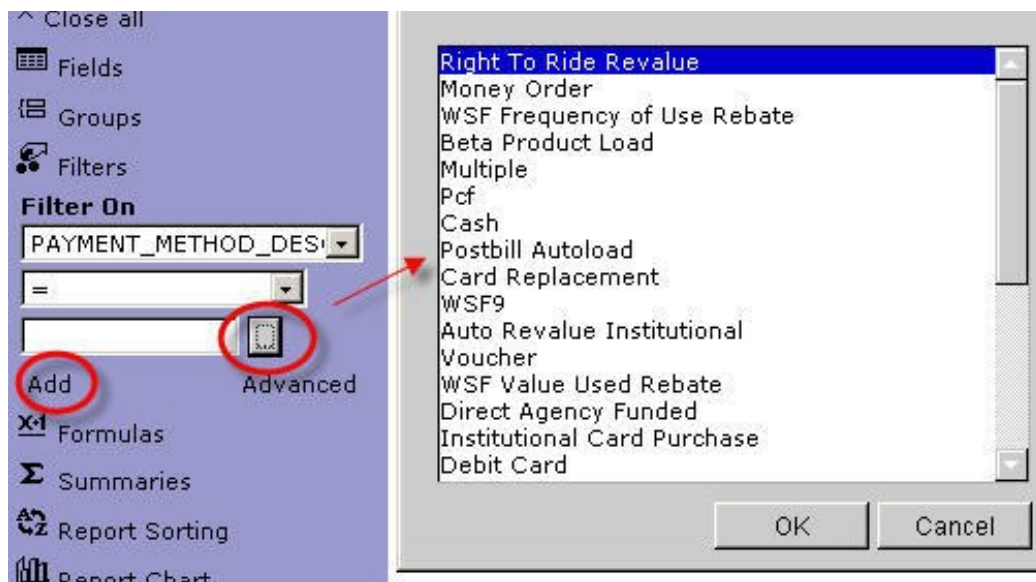
Figure 28: Browse field value to equate it to a filter.

3.3.6.2 Create Filter – Advanced Options

For more robust filter creation, select the **Advanced** link as shown in Figure 28. The Create Filter window will appear as shown in Figure 29. The system will not accept freehand typing, so no syntax errors will occur.

The filter window displays the filters that you have created along with the list of operators available and list of available fields within the data source (except memo and BLOB data types). It also displays operators and values for comparison against the field.
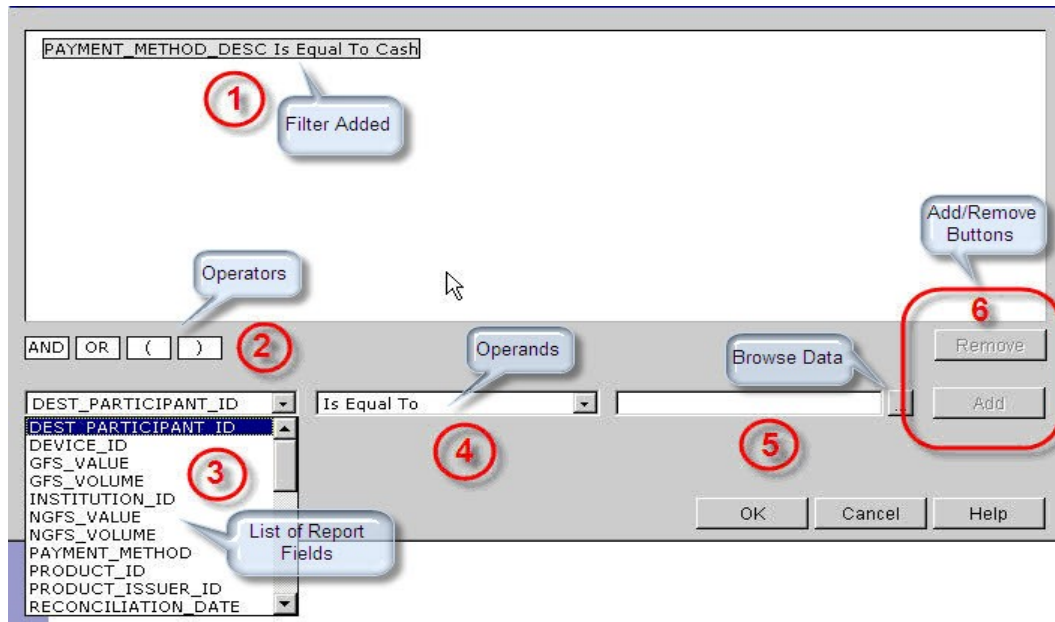
Figure 29: Advanced filter window for robust filtering of data on the reporting field.

When the advance filter option is created, the user needs to click the Add button to add the filter into the report.
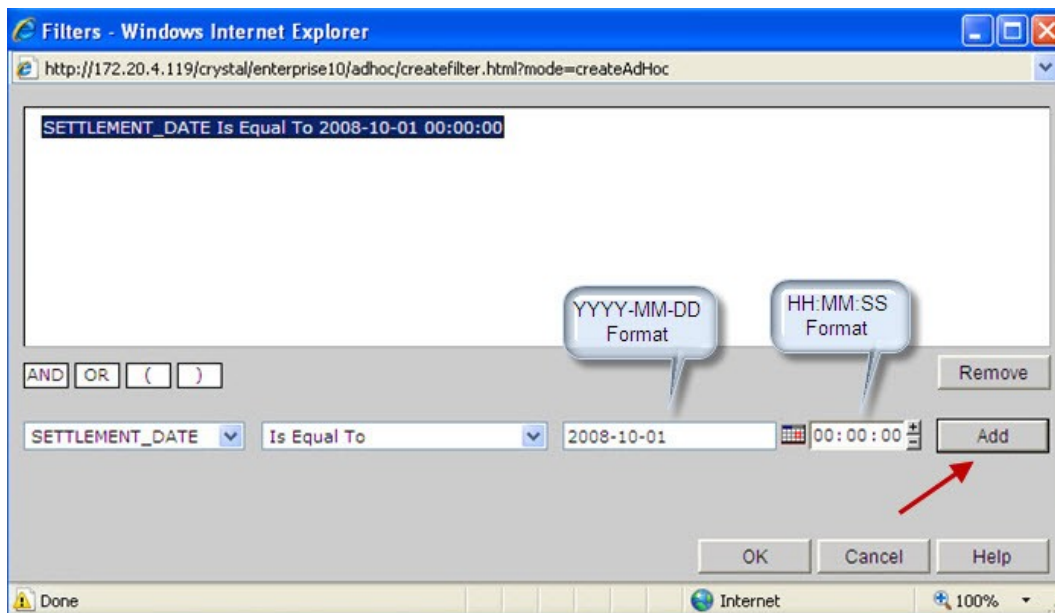
Figure 30: Advanced filter for adding filter on date time reporting field.

3.3.6.2.1   Create a Comparison

Create a filter by selecting the field from drop-down list that you want to apply the comparison on. Based on the selected field data type, the comparison options may change. For example with the Date data type, the "Is In The Period" comparison option is available. Several preset period types are available including commonly used date ranges such as month to date, year to date, etc. as shown in Figure 31.
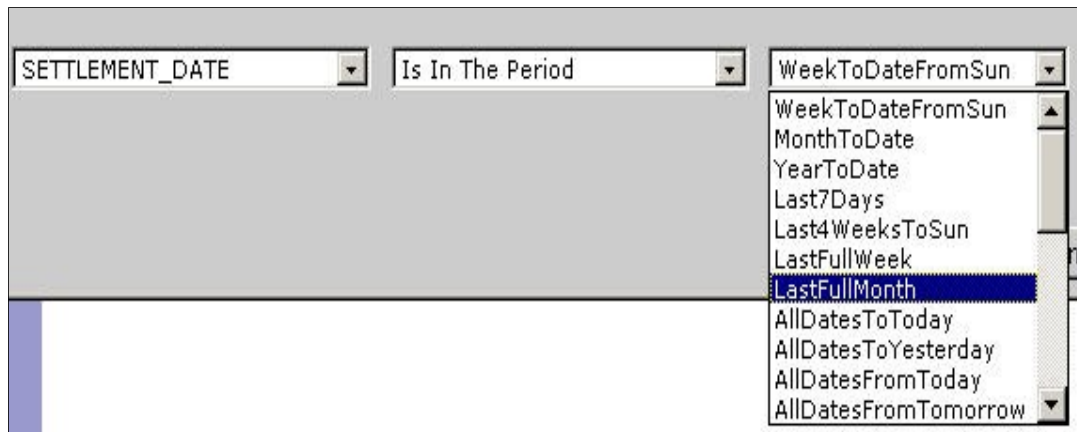
Figure 31: List of preset date ranges for the Date data type.

3.3.6.2.2 Add Multiple Filters

To create multiple filters, select "AND", "OR", or "(" and ")" between the filters (double-click to add). When the AND operator is selected, all filters on either side of the AND must evaluate to "TRUE" for the record to be selected as shown in Figure 32.
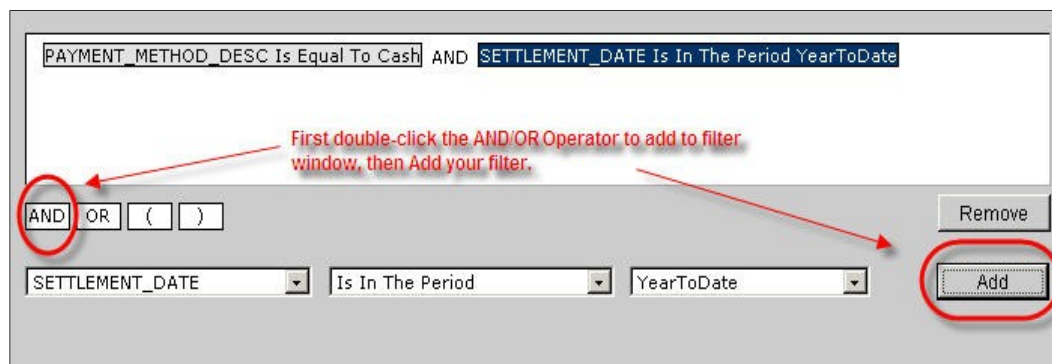
Figure 32: Adding multiple filters using AND, OR operators.

When the OR operator is selected, only one filter on either side of the OR must evaluate to "TRUE" for the record to be selected. "(" and ")" are used to group filters. An example which illustrates the use of parentheses is as follows:

The filter type to be applied to an Ad hoc reporting field is "all cash payments received in the current year OR all purse loads occurring in the current year". This can be written in two ways: one without using parentheses and another with using parentheses (which is the right method to use while filtering) to filter reporting field.

• If written:

  PAYMENT_METHOD_DESC Is Equal to Cash OR TXN_DESC Is Equal to Purse Load AND SETTLEMENT_DATE Is in the Period YearToDate.

  This method without using parentheses evaluates as "either the payment method is cash OR the transaction is purse load" (one of the two must be right), AND "transaction is a purse load AND it took place in this year" (both must be right). In this method, there is no correlation between the payment method and the date, in which case the second method of filtering data with parenthesis is the correct method to be followed. This is illustrated as below.

• Written with "(" and ")" should be:

(PAYMENT_METHOD_DESC Is Equal to Cash OR TXN_DESC Is Equal to Purse Load) AND SETTLEMENT_DATE Is in the Period YearToDate.

This evaluates to "either the payment method is cash or the transaction is purse load AND both must have taken place in the current month". It's apparent how the parentheses are required to make the statement evaluate correctly.

In the above two methods PAYMENT_METHOD_DESC, TXN_DESC and SETTLEMENT_DATE are the reporting fields and YearToDate is the condition used for date data type (SETTLEMENT_DATE), which can be seen in Figure 32.

3.3.6.2.3   Remove Filters

The user needs to click the **Advanced** button below the "filter On" select options and go to the window as shown in Figure 32, and click on the filter, "SETTLEMENT_DATE Is In The Period YearToDate" which turns into blue color and highlights the **Remove** button on top of the **Add**. Clicking the **Remove** button will remove the filter from the existing report.

3.3.7   Formulas

A formula is a symbolic statement of the modifications you want to perform on a certain data before it is printed on your report. Some common examples of formulas are:

* To calculate a numerical value on numerical data type field, the following syntax is used, where the field is always written in flower brackets.

  {Numerical field}*80

* To format a text on a report for example to change the customer field name from an uppercase to lowercase, the following syntax is used, where "Customer" is either the Business view name or Report data Source name and "Customername" is the field name.

  Lowercase({Customer.Customername})

* To extract a part of a given (text) string data type field the following syntax is used, in this formula the first letter of the string is given as the output.

  {Text field}[1]

* To extract part of a given date data type field the following syntax is used, in the following example the output is the month name.

  Month({Date field})

3.3.7.1   Formula Components

Formulas may contain components such as:

* Business Views – Usually field name is prefixed with business view name with a dot in between.

  {Businessview.Fieldname}

* Numbers

  1,2,578,12.99 etc…

* String (Text). Usually text is inserted within quotations.

  "hello", "12 Grand River Avenue", "Seattle – 98104" etc…

- Operators

   * , % , + , = , / , - etc…

- Functions are built within Crystal Reports.

   Uppercase({Fieldname})

- Control structures

   "If", "If then else", "while" and "for" loops etc.

- Group field values

   Sum({Fieldname},Groupname)

- Other formulas referenced in the current formula are prefixed by the @ sign.

   ({@formula1} + {@formula2}) / {@formula3}

3.3.7.2   Formula Syntax

Syntax is a set of rules used to make a correct formula. Formulas must be written in such a way that Crystal Reports can understand it. There are many different rules that apply to formula syntax. The online help feature can provide examples for different components and formulas. Some of the syntax rules are:

- Enclose string (text) data types in quotation marks.

- Enclose arguments for functions in parentheses (when applicable).

- Referenced formulas are to be preceded with the @ symbol.

- Numerical data types are typed without any enclosing symbols like quotations.

Note: Crystal Reports supports formulas written in Basic syntax and Crystal syntax. When creating or modifying formulas in Ad hoc reports, the user must always use Crystal syntax, because Crystal Reports Explorer does not support Basic syntax.

3.3.7.3   Formula Window

The user needs to click the **Formulas** button on selected options of the Ad hoc report main page to pull a formula window. Figure 33 illustrates the list of options within a formula window. The lists of options are:

13. **Formulas** – Shows all the list of formulas created within the report.

14. **New / Remove** – Create a new formula or remove an existing formula from the report.

15. **Formula Name** – Name of the current formula that user is in the process of creating.

16. **Formula Text** – This is the place where the formula syntax is written manually.

17. **Fields** – Lists all the available fields, summaries, and formulas within the report.

18. **Functions** – Lists the present built-in functions within the Crystal Reports Explorer. Clicking **Help** will provide detailed information on the available functions.

19. **Check** – Checks the user formula syntax for errors. A message will appear explaining any errors that are found in the report.
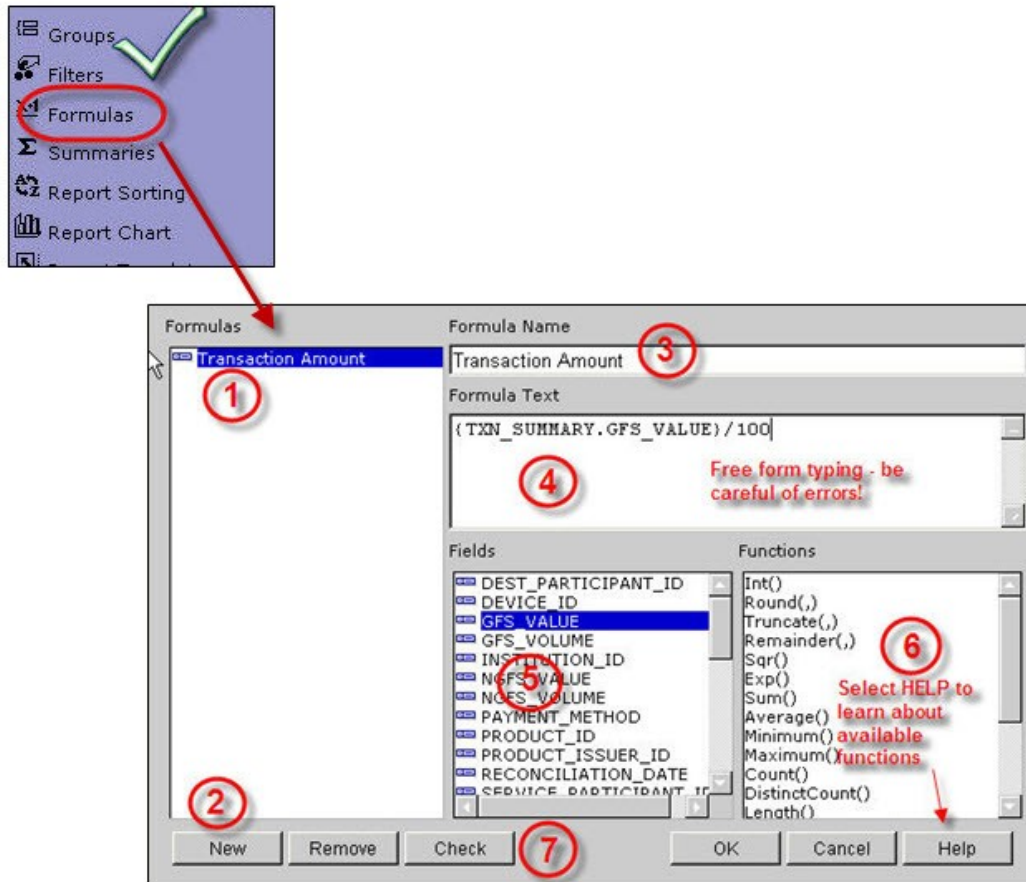
Figure 33: Formulas window in Crystal Reports Explorer.

3.3.7.3.1   Create New Formula

The Formulas list will be blank until at least one formula is created. Create a new formula by clicking the **New** button. "New Formula" will appear in the Formula Name area as shown in Figure 34. Type the name of the formula that user has created. At this time the user can close the formula window even with a blank formula. When the user reopens the formula window, the formula name will reappear in the formulas list. The user can modify it by selecting in the list.
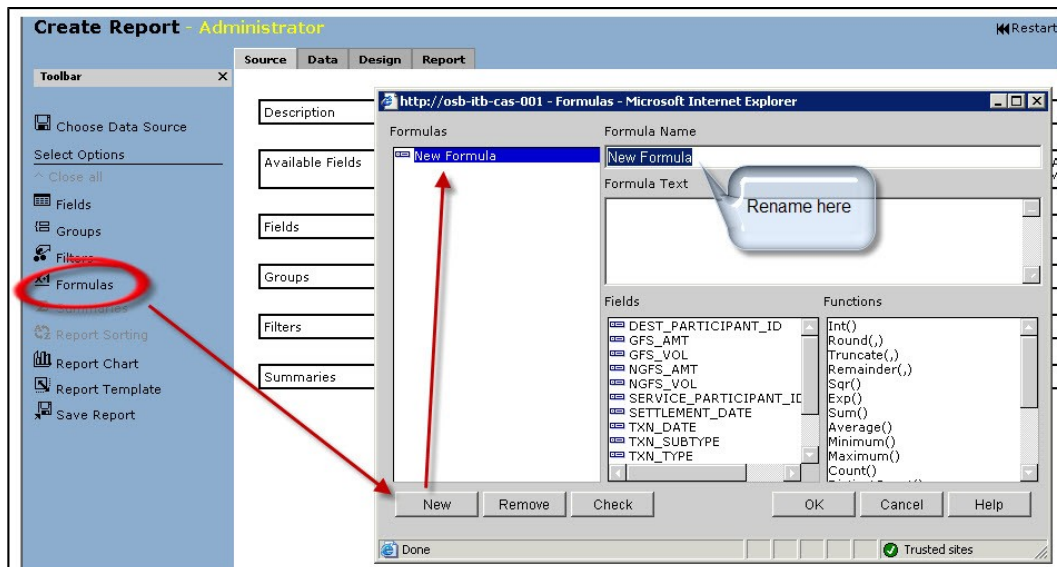
Figure 34: New formula window in Crystal Reports Explorer.

3.3.7.3.2 Formula Text

In the Formulas window, Formula Text is the place where the user enters formula using Crystal syntax. To manipulate the existing fields, formulas, or summaries, select them and add them to the Formula Text by double-clicking the item in the Fields list as shown in Figure 35.
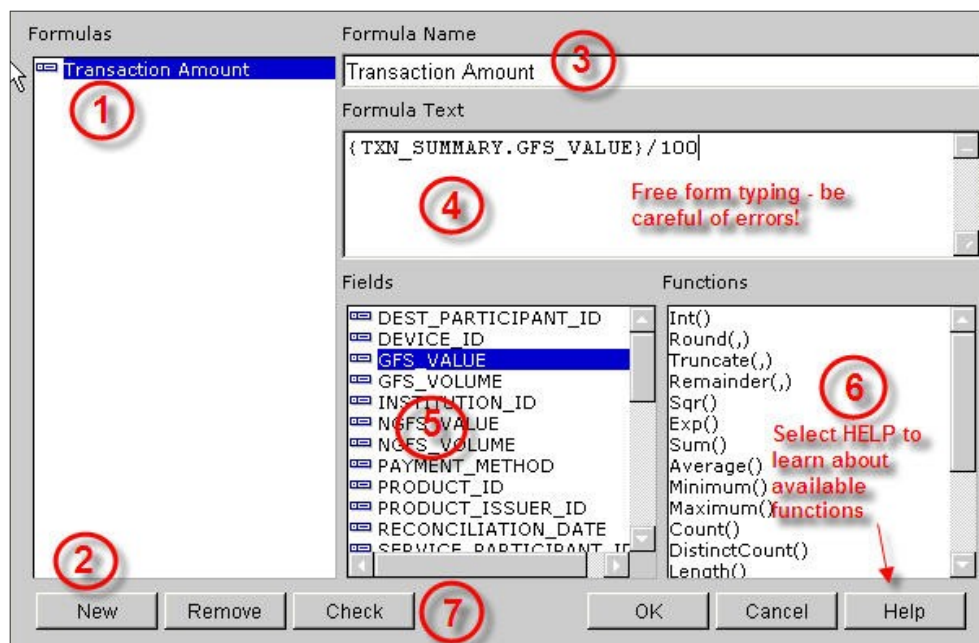
Figure 35: Completed formula window.

Perform functions by double-clicking the function name in the Functions window to add them to the Formula Text or type them directly (click **Help** for detailed information on built-in functions).

The user can perform mathematical functions on numerical data types. The user needs to check the formula when complete. If there is an error in the syntax, an error message will

appear. The formula cannot be added into the report until the error is fixed. Once the formula is added into the report, it appears in the Fields area on the source tab of the Crystal Reports main page as shown in Figure 36.
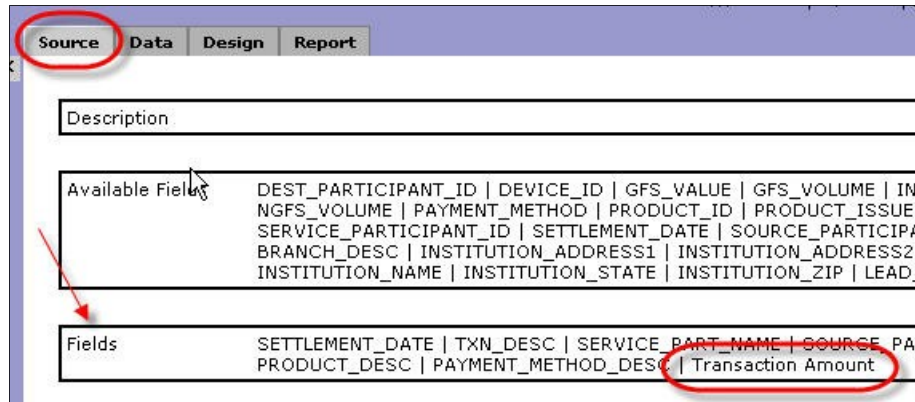
Figure 36: Formula being displayed in the Fields area of source tab.

3.3.7.3.3   Remove/Delete Formula

When you create a formula, Crystal Enterprise stores the specification for creating the formula, using the name you assigned to it, and also places a working copy of that formula in the Fields area of the Source tab.

You can remove a working copy of a formula from the report, without having to delete the formula specification entirely. Or, you can delete the formula specification, thereby entirely deleting all occurrences of the formula. To remove the field from the source tab, select the Fields link from the Select Options in the Main page and click **Advanced** as shown in Figure 37. Highlight the formula in the Fields to Display list and click the remove button "<".
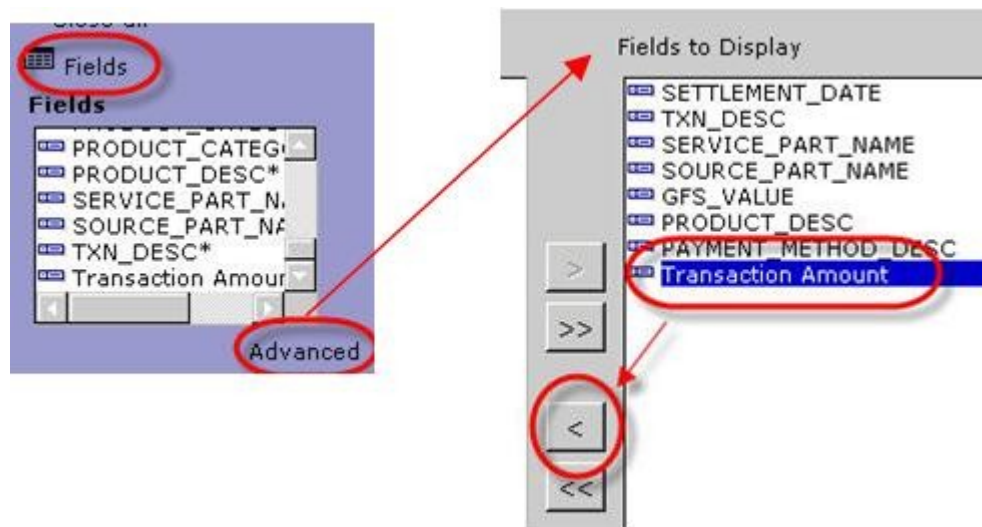
Figure 37: Deleting formula from Fields list in the source tab of Crystal Reports Explorer main page.

To completely remove / delete the formula from the Ad hoc report, the user needs to select the Formulas link in the Select Options which opens Formulas window. Highlight the formula to be deleted in the Formulas list and click the Remove button as shown in Figure 38. All working copies of the formula are deleted, and the formula specification is removed from the list of available fields.
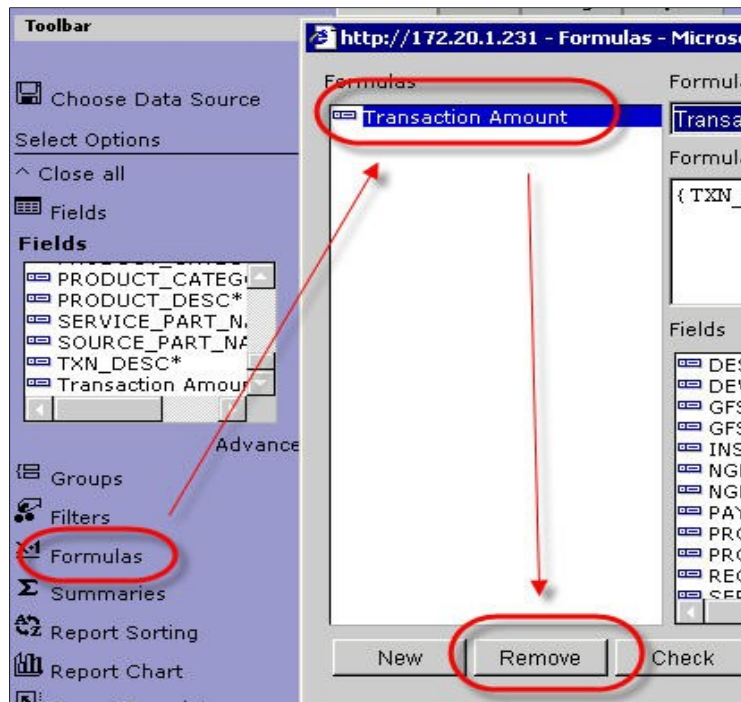
Figure 38: Deleting formula completely from the report without leaving any instances.

3.3.8   Summaries

A summary is a value generated as a result of an evaluation, a tally, or a calculation performed on data from a single group. One of the main reasons for creating group is to calculate summaries on group for records rather than for all records.

Summaries can be performed on all group levels as well on a report total. The common summary operations are:

- **Sum** – Enables you to add the values in the report. For example the formula below summaries all the values in the field name with respect to that particular group.

    Sum({Fieldname},Groupname)

- **Count** – Enables you to count the number of values that appear in the report. For example the formula below counts the number of values in the particular field with in the group.

    Count({Fieldname},Groupname)

- **Average** – Enables you to average the number of values in the report. For example the formula below averages the values in that particular field.

    Average({Fieldname})

- **Maximum** – Enables you to calculate the maximum value that appears in a set of values in a field. For example the formula below derives the maximum value in list of values in that particular field.

  Maximum({Fieldname})

- **Minimum** – Enables you to calculate the minimum value that appears in a set of values in a field. For example the formula below derives the minimum value in list of values in the field within the group.

  Minimum({Fieldname},Groupname)

3.3.8.1   Create Simple Summary

To add a simple summary in the report click the summary option. Two drop-down lists appear in the Select Options as shown in Figure 39. On the first tab, select the field you want to summarize and in the second tab select the summary option. Click **Add** after picking the two lists. The summary is added to the report and will appear in the Summaries section on the Source tab.
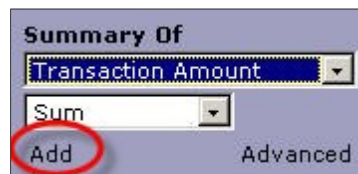
Figure 39: Creating simple summary in Ad hoc report.

3.3.8.2   Create Summary – Advanced Options

User can perform summaries on groups by clicking the **Advanced** link as shown in Figure 39. The summary window opens as shown in Figure 40.

List of summaries are shown in Summaries area. To add a new summary based on the group, pick the summary field and then select the type of summary to be performed on that field and select the group on which the summary will be calculated. Then click **Add** to add the summary to the report. You can modify or remove the summary from the report by clicking on the appropriate buttons as shown in Figure 40.
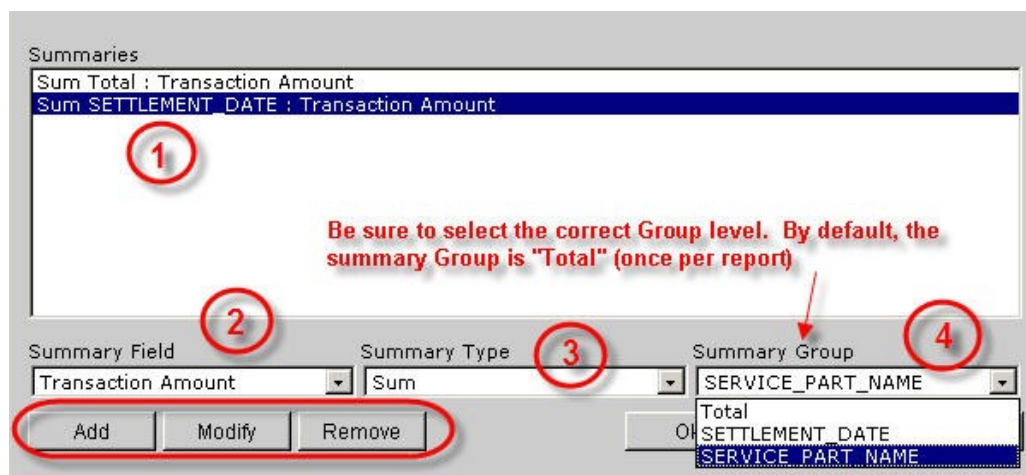
Figure 40: Advanced window options to create summary based on group.

When a user creates a summary the default option for the group is always "Total", which will be created at the end of the report. User needs to select the appropriate group to create the summary.

All the summaries that are created by a user can be listed in Summaries section of the Source tab on Crystal Reports Explorer Main page as shown in Figure 41.

Figure 41: List of summaries created in a report.

3.3.9   Record Sorting

A sort field is the field that determines the order in which data appears on your report. Almost any field can be used as a sort field. A field's data type determines the method in which the data from that field is sorted. The user cannot sort on memo or BLOB data types. For example a numeric field is sorted in numeric order and a date field is sorted in chronological order.

Sorting direction refers to the order in which the values are displayed once sorted: for example, ascending or descending order.

3.3.9.1   Create Simple Sort

With no sorting selected, the data will appear in the same order in which the data was entered in the data source. To sort your records in a way to make the report more understandable, select the Report Sorting option as shown in Figure 42.

Figure 42: Sort on option to apply simple sorting on field in Ad hoc reporting.

Two drop-down lists appear. To perform simple record sorting, select the field on which the sorting needs to be performed. Choose the sorting direction (Ascending or Descending). Click the **Add** button to add the sort to the required field in the report.

3.3.9.2   Create Sort – Advanced Options

In order to sort using more options, you need to click the **Advanced** button as shown in Figure 43. A new window pops up displaying the options. There are two tabs for advanced sorting using Details and on Groups or Summaries.

When you sort rows of data that are displayed in the Details section of a report, you arrange them in ascending or descending order according to the values in a single field, or the values in multiple fields.

In single-field sorting, all the records used in the report are sorted based on the values in a single field. In multiple-field sorts, the program first sorts the records based on the values in the first field selected, putting them in ascending or descending order as specified. When two or more records have the same field value in the first sort field, the program then sorts those records based on the value in the second sort field.
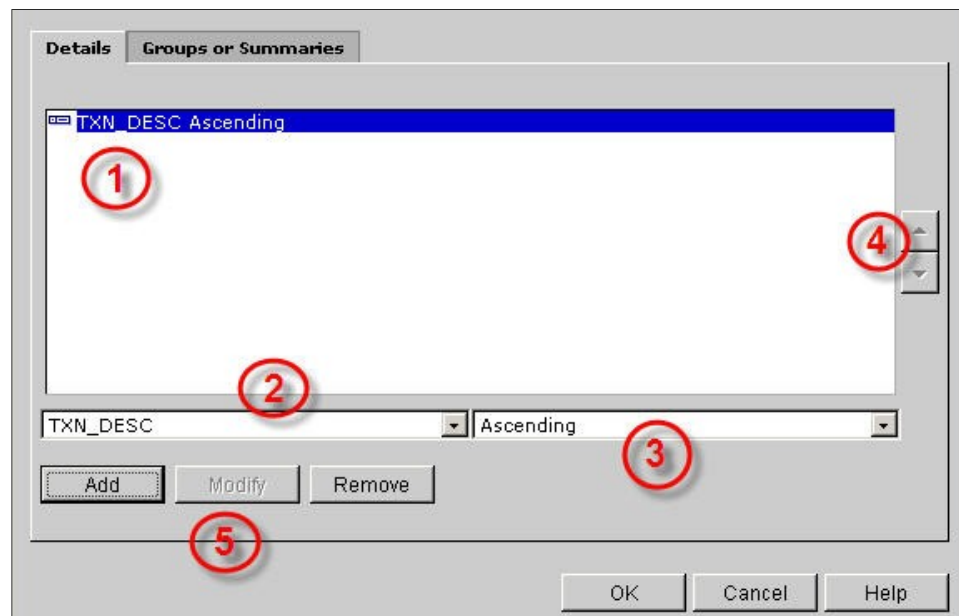
Figure 43: Sorting fields in Details section of an Ad hoc report.

Click the **Advanced** button and select the field to sort records and select the sort direction. If there are multiple sort fields selected, there is a up and down arrow to change the sort order based on fields as shown by the label "4" in Figure 44. By clicking the up or down arrow, the order of the fields can be changed. Click the **Add** or **Remove** button to finish sorting in details section of the report.

To sort using Group level, select the Groups or Summaries tab and pick the Groups radio button. Select the group to be sorted from the available list as shown in Figure 44. Select the sort type if applicable (available only with date-time data type). Select the sort direction and click the **Add** button to add the sort to the respective group in the report.

Figure 44: Sorting using Group level

To sort using summary level, select the Summaries radio button as shown in Figure 45. Select the summary from the list of summaries created in the report.

Then select the sort type either directional (ascending or descending based on summary value) or Top N (Displays the top N values, where N is any number) or Bottom N (Displays the bottom N values) based on the summaries. For example, in order to display the data in the report based on the top four summary values, select N = 4.

If Top N or Bottom N is chosen, you can select to discard all other records (based on the summary value) or include all other records in a separate "Others" group as shown in Figure 45.
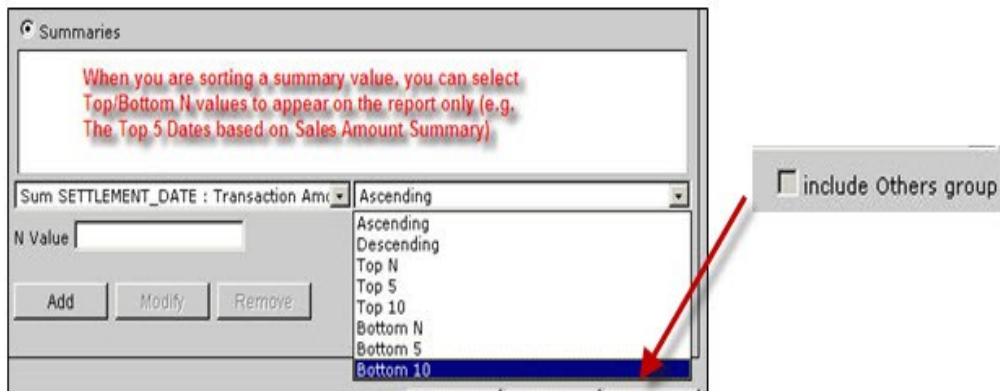
Figure 45: Sorting using summary level

In order to remove the sorting, on the toolbar click Report Sorting and click the **Advanced** button. The sorts window appears. On the Details tab, select the sort that you want to remove and click **Remove** and **OK**.

3.3.10   Completed Source Tab

Once all the options have been completed, the Source tab will display the information located within each section as shown in Figure 46.

Figure 46: Completed source tab in the main page of Ad hoc report

3.4   Data Tab

It is recommend that you build your report on the Source tab, and switch to the Data tab to preview the data, in order to minimize the impact on your database servers and to improve the performance of your report.

At any time after the first field is selected, you can view the data that will display on the report in its raw form by selecting the Data tab. As filters, formulas, summaries, and sorting are applied to the report, the changes are visible in the Data tab. This can help you to refine your report options to better suit your needs. This information can be exported if desired.

3.4.1   View Results

The Data tab displays data in both Group View and Flat View. In Group View, you can click on a group in the Group Tree to display only the records in that specific group. Click a group in the Group Tree to jump to the section of the report that displays the records for that group. You can click Show/Hide Group Tree to switch the Group Tree off or on as shown in Figure 47.
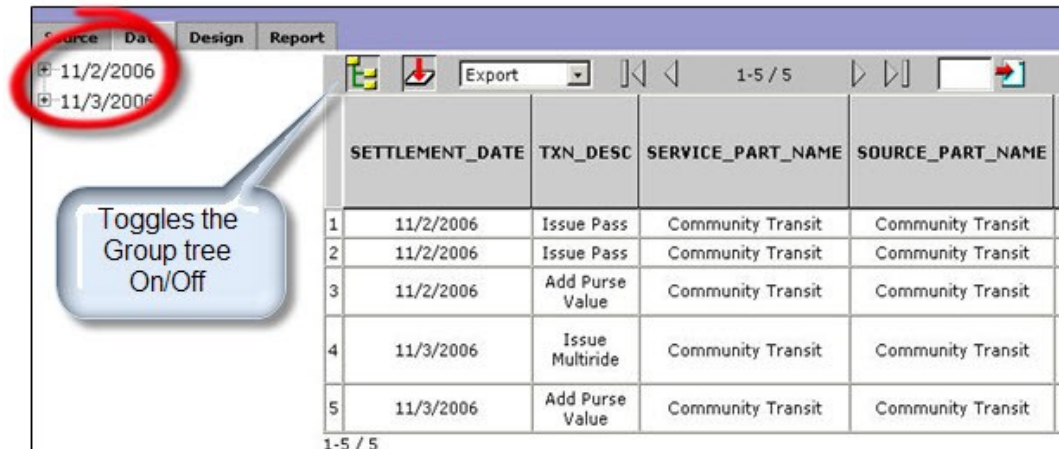
Figure 47: Group view in Data tab of Crystal Report Explorer

Flat view displays all the records in the Data tab. The report can be exported even in this view.

You can move through the records using the record navigation buttons as shown in Figure 48. The number of records visible in the window is shown followed by the total number of records matching the selected filters. You can jump to a specific record by entering the record number in the Find Row text box.
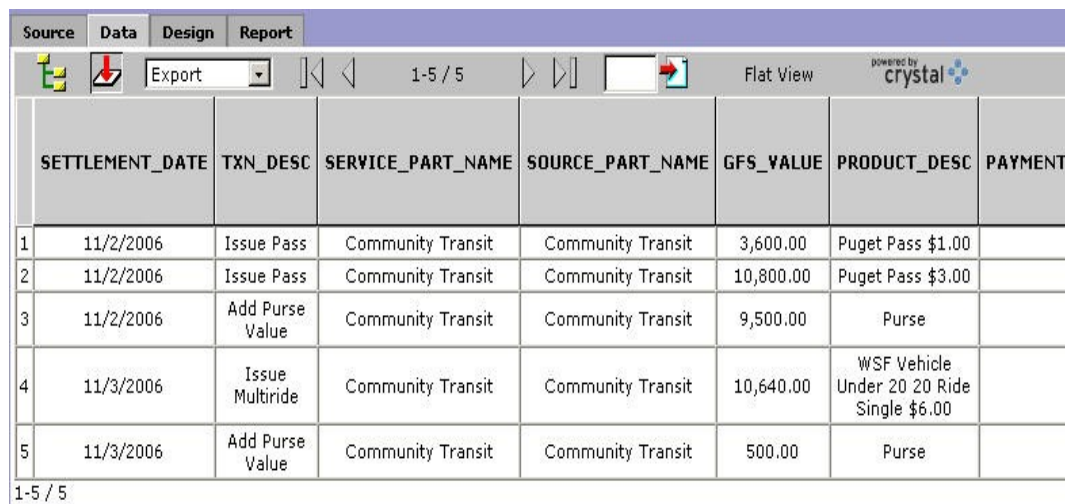
Figure 48: Flat View in Data tab of Crystal Reports Explorer

All formulas and summaries will appear on the far right. Formulas are identified with a "@" prefix. Summaries will display the summary type preceding the summarized field (In this example "Sum of…") as shown in Figure 49.

One can remove the summaries and formulas from the Data tab by accessing the Fields list and clicking the **Advanced** button.

Figure 49: Display of Summaries and Formulas in Flat View of Data tab

3.4.2   Export Results

Once you have created a report, you can export it to your local computer drive in one of the following formats by choosing from the drop-down list as shown in Figure 50.

- **MS Word** – Exports the <u>current batch of data</u> ~~report~~ to .doc format.

- **MS Excel** – Exports the <u>current batch of data</u> ~~report~~ to .xls format.

- **HTML** – Exports the ~~report~~ <u>current batch of data</u> to .html format.

- **MS Word All** – Exports all ~~the~~ report <u>data</u> ~~records~~ to .doc format.

- **MS Excel All** – Exports all ~~the~~ report <u>data</u> ~~records~~ to .xls format.

- **HTML All** – Exports all ~~the~~ report <u>data</u> ~~records~~ to .html format.

Note: You can change the batch size (number of records displayed in each window "page" of the Data tab) by modifying your preferences. The default batch size is 50 records.

Figure 50: Export options in Crystal Reports Explorer

When a user chooses the desired export option, a window will appear prompting user to open, save, cancel, or view more information as shown in Figure 51. If a user clicks **Open**, the associated application (for example MS Excel, which should be loaded on the computer that you are working from; otherwise, the application will not launch and the export will fail) will open displaying the batch or all records. By clicking **Save**, the user will be prompted for a file name and location to save the data. A user can cancel the export option by clicking **Cancel**.
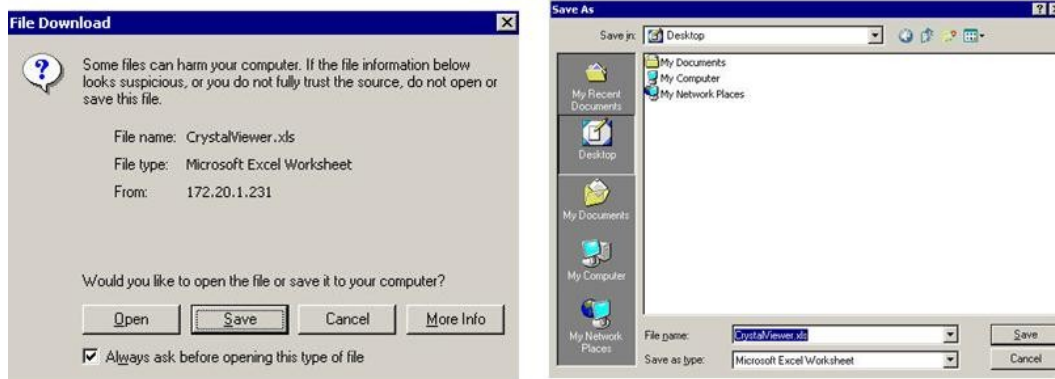
Figure 51: Export save options in Crystal Reports Explorer

3.5   Design Tab

Select the Design tab to design the report so that it is viewable properly in the Report tab. By default, the fields are placed from left to right in the order they are added in the report.

If the fields reach the right margin, they will wrap back around and begin again from the left margin (causing fields to look very disorganized and unreadable). The user can adjust the size of the field in the Design tab so that the report looks more presentable.

Report sections in Design tab are shown in Figure 52:

- **Report Header** – Objects placed in this section will be displayed on the first page.

- **Page Header** – Objects placed in this section will be displayed on top of each and every page.

- **Group Header** – Objects placed in this section will be displayed at the beginning of each group (if groups are present).

- **Details** – Each record will be displayed in its own line within the appropriate group (if groups are present).

- **Group Footer** – Objects placed in this section will be displayed at the end of each group (if groups are present).

- **Page Footer** – Objects placed here will be displayed at the bottom of each page.

- **Report Footer** – Objects placed here will be displayed on the last page of the report.
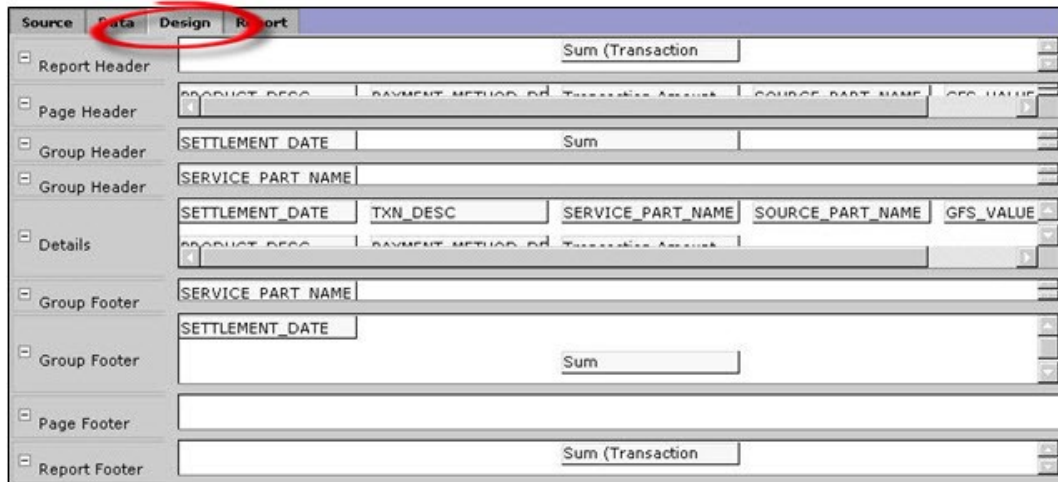
Figure 52: Design tab in Crystal reports Explorer main page.

Designing a report takes patience and steady hands. Be sure not to click simultaneously because too many commands sent through the web-based application can lock the report application. Not all design options are available in Crystal Reports Explorer, because this tool is meant only for Ad hoc report generation.

When a user right-clicks on the black space of the Design tab in any of the sections, a window will open giving user options, as shown in Figure 53.

Figure 53: Report design options in Crystal Reports Explorer

3.5.1   Add Object

User can add text objects to the report where the cursor is located. Replace the existing text with your own text. You can edit the text by right-clicking the text and selecting **Edit text**.

3.5.2   Add Special Field

Special fields are predefined fields in the Crystal Reports Explorer that can be added to your report in the Design tab. Some of the common examples of special fields are to add page number, print date, report title.

3.5.3   Section Expert

You can format sections in a report. In the Sections list, the section that you want to format is selected by default; you can select any other section by clicking on it. For example, "new page after" and "section suppress" can be done through Section Expert.

3.5.4   Move and Resize Object

When you click on an object in the Design tab, it becomes activated with a crosshair at each corner as shown in Figure 54. The object can be resized by clicking and dragging any crosshair. By clicking the center of the object, you can drag it to a new location within the current section (Note: Objects cannot be moved from one section to other). Holding the CTRL or SHIFT key while clicking will select multiple objects in the report.

Figure 54: To move and resize an object in Design tab

When multiple objects are selected, you can align them to each other (Top, Left, Right, and Bottom). Right-clicking on field object(s) will open a small window with the options shown in Figure 55.
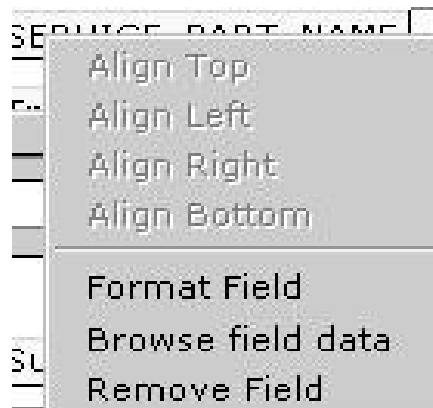
Figure 55: Right click field options in Design tab

3.5.5   Format Field

Opens a window in which text formatting, borders, and other settings can be manipulated.

3.5.6   Browse Field Data

A new window is opensed displaying the first 1000 records of data of in the selected field.

3.5.7   Remove Field

Field object is deleted from the report. It will no longer appear on the Data tab.

3.6   Report Chart

You can chart summarized values for groups of data. Before inserting a chart, ensure that you have at least one group in your report, and ensure that you have created the summary field whose values you want to display on the chart for each group.

Note: If you have multiple groups in your report, ensure that the group you want to chart on is at the top level. To rearrange groups, click **Groups** on the toolbar, and then click **Advanced**.

3.7 Report Template

A template is an existing report file whose formatting can be added to a new report. At the same time, the formatting of the template report's fields and report objects are applied to the new report. Use templates to give any number of reports a consistent look without having to format each one individually. Choose the report template you want to apply from the appropriate ~~template~~ folder. ~~You can either use report sample landscape or portrait that have been provided in the folder which contain ORCA logo along with layout of standard online report.~~ Figure 56 ~~shows the folder path along with the template options available to you.~~
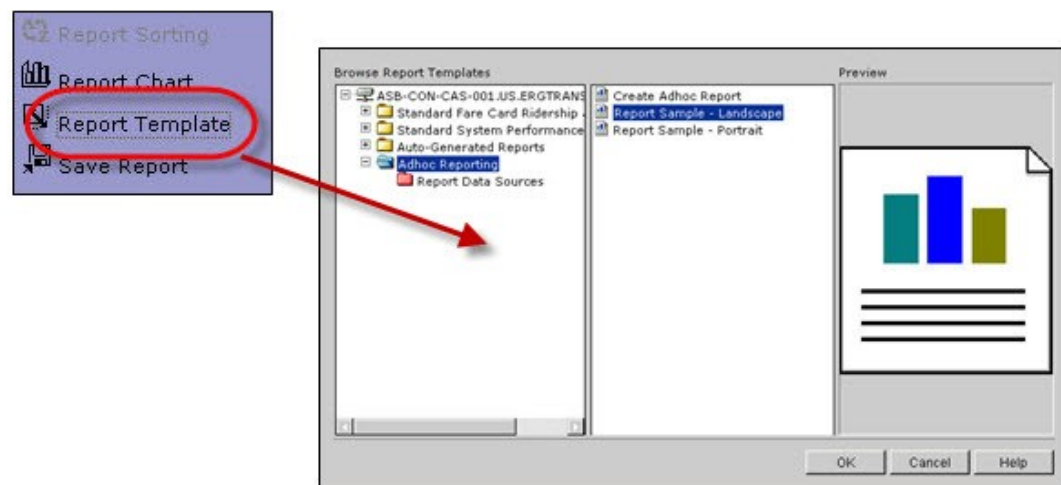
~~**Figure 56: Applying template to an existing Ad hoc report**~~

~~The report samples that are available to you do not have any field or data associated, so the only things that would be applied are the images and special field formatting. If an existing report is used as a template, the following reports objects like fields, groups, charts, summary fields, hyperlinks, bitmaps, lines, boxes, borders, and static OLE objects. You should be very careful when using an existing report as a template.~~

3.8 Report Tab

Click the Report tab to preview your Ad hoc report, and make further layout or format modifications. At any time during the development of the report, you can view the progress by selecting the Report tab or the View link in the upper right-hand corner as shown in Figure 57. The view link will open the report in a new window.

The following options can be performed while viewing the report similar to those available when accessing a standard online report system as shown in Figure 58: turn on/off group tree, export the report, refresh the report data, print the report, view report sections, navigate through the report pages, jump to a specific record by entering in the Find Row, search for a specific string, and adjust view settings.

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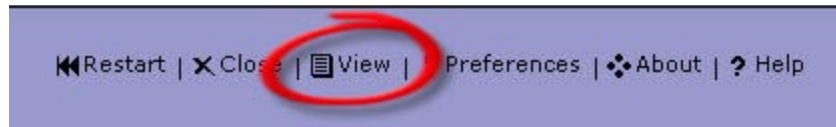
Figure 57: View toolbar link in Crystal Reports Explorer main page
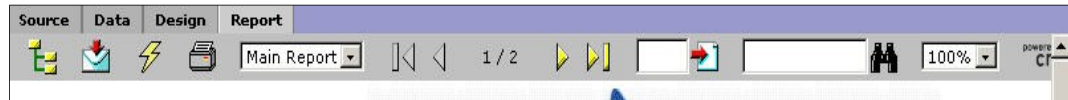
Figure 58: Report tab options in Crystal Reports Explorer

3.9 Save Report

To access the report / data through Crystal Enterprise ePortfolio (the standard online reporting system), you can save the report to your personal folder or to the shared Agency folder.

Select **Save Report**, then enter the name of the report you have created. Enter a report description if necessary. Then navigate to your personal folder or Agency folder within the Crystal Enterprise system to save the report. The saved report can be accessed by logging on to the Crystal Enterprise online reporting system. If the report is saved to the Agency folder, all Agency members can view the report. The folder structure is shown in Figure 59.
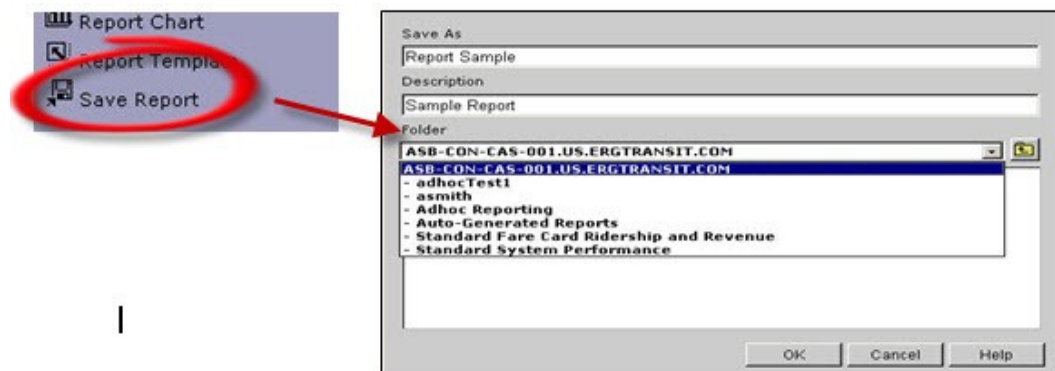
Figure 59: Folder structure to save report in Crystal Enterprise

Appendix A ~~Standard~~ Report ~~Data Sources~~Business Views

This appendix presents the data sources used by the standard reports available within the CE online reporting system. This information can also be found within SEA-00833 RFCS Reporting Requirements (DR 111) [4].

A.1　ESB Service Bureau Call Center Metrics

The following Business Views are associated with the ESB Service Bureau Call Center Metrics reports.

A.1.1　ACCURACY_OF_SERVICE

The following table identifies the fields available in the ACCURACY_OF_SERVICE view, which is used to source the Accuracy of Service report.

Table 3. ACCURACY_OF_SERVICE

Field Name	Format	Description
CALL_ID	Number	The unique identifier of an incoming call to the CSR
ORIGINAL_CALL_DATE	DateTime	The date the original call was made
REOPENED_CALL_DATE	DateTime	The date the call was reopened (if applicable)

A.1.2　CALLDETAIL

The following table identifies the fields within the CALLDETAIL view, which is used to source the following reports:

- Answer Rate
- Abandoned Call rate
- Number of Rings
- Average Wait Time
- Average Hold Time
- Call Transfer Rate

Table 4. CALLDETAIL

Field Name	Format	Description
CALLDIRECTION	String	Identifies if the call is incoming or outgoing.
CALLDURATIONSECONDS	Number	A numeric value that identifies, in seconds, the length of time the call was connected to the ESB (includes time spent on hold).
CALLEVENTLOG	String	A free-text field that captures any note that was made in reference to the call, as well as transfers, hold status, and various other information.
CALLID	String	The unique identifier used to identify a specific call.

Field Name	Format	Description
CALLNOTE	String	Manually entered text string against a particular call for informational purposes only.
CALLTYPE	String	A description of the type of call being made.
DNIS	String	The Dialed Number Identification Service – this numeric value identifies the number that was dialed in association with the call as there are multiple numbers associated with ESB support.
HOLDDURATIONSECONDS	Number	If the call was placed on hold, this is the numeric value, in seconds, of that amount of time.
INITIATEDDATE	DateTime	The date and time the call was captured by the ESB phone system.
LOCALNAME	String	The user name of the person who last was associated with the call.
LOCALUSERID	String	The unique identifier of the user who last was associated with the call.
STATIONID	String	The unique identifier of the actual phone in which the call was last associated.

A.1.3   CALL_REASON

The following table identifies the fields available in the CALL_REASON view, which is used to source the Reason for Call report.

Table 5. CALL_REASON

Field Name	Format	Description
CALL_DATE	DateTime	The date and time the call was made~~The date the call was made~~
CALL_ID	Number	The unique identifier of an incoming call to the CSR
OCCURRENCE_REASON_DESC	String	A description of the event assigned to the call

A.1.4   SATISFACTION_ASSESSMENT

The following table identifies the fields available in the SATISFACTION_ASSESSMENT view, which is used to source the Tier 1 Satisfaction Assessment report.

Table 6. SATISFACTION_ASSESSMENT

Field Name	Format	Description
QUARTER	Number	The quarter (1, 2, 3, or 4) within the year associated with the survey results.
QUESTIONS_ANSWERED	Number	The number of survey questions answered.
RESPONSE_ID	Number	The unique identifier for the survey results.
TOTAL_RATING	Number	The total rating of all answer questions (each question value 1-10) for the respondent.
YEAR	Number	The year associated with the survey results.

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A.2   Financial Management

The following Business Views are associated with the Financial Management reports.

A.2.1   CARD_REFUNDS

The following table identifies the fields available in the CARD_REFUNDS view, which is used to source the Card Refunds report.

Table 7. CARD_REFUNDS

Field Name	Format	Description
CARD_STATUS_DESC	String	The description of the current status of the card (should be BLOCKED).
CARD_STATUS_ID	Number	The unique identifier of the current status of the card.
CSN	Number	The card serial number of the card the refund was processed against.
DEVICE_ID	String	The identifier of the CST that initiated the refund transaction.
PARTICIPANT_ID	Number	Unique identifier of the party responsible for initiating the refund transaction.
PARTICIPANT_NAME	String	Unique name of the party responsible for initiating the refund transaction. This will be an Agency name OR the Mail Center.
RECEIPT_NUMBER	Number	The numeric identifier associated with the refund transaction.
REFUND_DATE	DateTime	The date the refund transaction was created and sent to the Clearinghouse for processing.
REFUND_FEE	Number	The value of any fee associated with the refund transaction (in cents).
REFUND_REASON_DESC	String	The descriptive reason associated with the card (should be REFUND).
REFUND_REASON_ID	Number	The unique identifier of the reason code associated with the card being refunded.
REMAINING_VALUE	Number	The value that was remaining on the PURSE at the time of the refund (in cents).

A.2.2   CLAIMS_SUMMARY

The following table identifies the fields available in the CLAIMS_SUMMARY view, which is used to source the Claims Summary (Fiscal Agent) report.

Table 8. CLAIMS_SUMMARY

Field Name	Format	Description
APPROVAL_DATE	DateTime	The date the claim was successful and the status updated by the Fiscal Agent.
APPROVED_AMT	Number	Amount of the initial claim that has been approved (in cents).
CLAIM_AMT	Number	Amount initially claimed (in cents).

Field Name	Format	Description
CLAIM_DATE	DateTime	The date the claim was entered into the system by the Fiscal Agent.
CLAIM_ID	String	Unique claim identifier.
CLAIM_STATUS_DESC	String	A description of the current claim status of the transaction.
CLAIM_STATUS_ID	String	Unique identifier for claim status.
COUNTERPARTY_ID	Number	The ID of the counterparty to the transaction. This is the participant that will receive an equal and opposite adjustment to their Settlement Account.
COUNTERPARTY_NAME	String	The name of the counterparty to the transaction.
PARTICIPANT_ID	Number	The ID of the Participant that is lodging the claim.
PARTICIPANT_NAME	String	The name of the Participant that is lodging the claim.

A.2.3   CARD_USAGE

The following table identifies the fields available in the CARD_USAGE view, which is used to source the following reports:

- Escheatment (Internal)

- Escheatment (State)

Table 9. CARD_USAGE

Field Name	Format	Description
ACTIVE	Number	Identifies whether the card is active or inactive. A card is considered inactive if it has not been used for at least a 2-year period as of June 30th the current year. 1=Active, 0-Non Active
~~BRANCH~~	~~String~~	~~If the card is an Institutional card, the branch name of the associated Institution.~~
CARDHOLDER_ADDRESS1	String	If the card is a linked card, the mailing address (line 1) of the primary cardholder.
CARDHOLDER_ADDRESS2	String	If the card is a linked card, the mailing address (line 2) of the primary cardholder.
CARDHOLDER_CITY	String	If the card is a linked card, the mailing address (city) of the primary cardholder.
CARDHOLDER_FIRSTNAME	String	If the card is a linked card, the first name of the primary cardholder.
CARDHOLDER_ID	Number	If the card is a linked card, the unique Id of the primary cardholder.
CARDHOLDER_LASTNAME	String	If the card is a linked card, the last name of the primary cardholder.
CARDHOLDER_STATE	String	If the card is a linked card, the mailing address (state) of the primary cardholder.

Field Name	Format	Description
CARDHOLDER_ZIP	String	If the card is a linked card, the mailing address (ZIP code) of the primary cardholder.
CSN	Number	The serial number of the card.
CURRENT_BALANCE	Number	The current balance on the purse (in cents).
INSTITUTION_ADDRESS1	String	If the card is an Institutional card, the mailing address (line 1) of the associated Institution.
INSTITUTION_ADDRESS2	String	If the card is an Institutional card, the mailing address (line 2) of the associated Institution.
INSTITUTION_CITY	String	If the card is an Institutional card, the mailing address (city) of the associated Institution.
INSTITUTION_ID	Number	If the card is an Institutional card, the Institution associated with the Card.
INSTITUTION_NAME	String	If the card is an Institutional card, the name of the associated Institution.
INSTITUTION_STATE	String	If the card is an Institutional card, the mailing address (state) of the associated Institution.
INSTITUTION_ZIP	String	If the card is an Institutional card, the mailing address (ZIP code) of the associated Institution.
LAST_PURSE_USE_DATE	DateTime	The date the purse on the card was last used.
LEAD_AGENCY_ID	Number	If the card is an Institutional card, the unique identifier of the Lead Agency associated with the Institution.

A.2.4   EXCEPTION_ITEMS

The following table identifies the fields available in the EXCEPTION_ITEMS view, which is used to source the Exception Items report.

Table 10. EXCEPTION_ITEMS

Field Name	Format	Description
AMOUNT	Number	The financial amount of the transaction that failed validation (in cents).
BUSINESS_DATE	DateTime	The business date associated with the exception transaction.
DEVICE_ID	String	The unique identifier of the device that generated the transaction that failed validation.
EXCEPTION_ID	String	The unique identifier of the exception associated with the failed validation.
EXCEPTION_DESCRIPTION	String	The detailed description of the exception.
PARTICIPANT_ID	Number	The unique identifier of the participant that generated the transaction that failed validation.
PARTICIPANT_NAME	String	The name of the participant that generated the transaction that failed validation.
TXN_DATE	DateTime	The calendar date/time of the transaction that failed validation.

Field Name	Format	Description
TXN_DESC	String	The description of the transaction that failed validation.

A.2.5   FARE_UNDERPAYMENTS

The following table identifies the fields available in the FARE_UNDERPAYMENTS view, which is used to source the Fare Underpayments report.

Table 11. FARE_UNDERPAYMENTS

Field Name	Format	Description
CSN	Number	The serial number of the card
EXPECTED_AMT	Number	The amount (in cents) expected for the boarding (minus any transfer credits or other credits)
MODE ID	Number	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESCRIPTION	String	The description of the type of transportation used in association with the transaction
PRODUCT_DESC	String	The description of the product associated with the underpayment transaction
RECEIVED_AMT	Number	The actual amount (in cents) deducted from the card for the boarding (all purse, pass, and/or multi-ride contributions)
ROUTE_ID	String	The route in which the transaction took place
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TXN_DATE	DateTime	The ~~business~~ date of the transaction with time stamp

A.2.6   INST_REG_PASS_REV_APPT

The following table identifies the fields available in the INST_REG_PASS_REV_APPT view, which is used to source the Institutional Regional Pass Revenue Apportionment report.

Table 12. INST_REG_PASS_REV_APPT

Field Name	Format	Description
ACCOUNT_TYPE_DESC	String	The type of settlement account in which the regional pass sales revenue apportionment was posted.
AGENCY_ID	Number	The unique identifier of the Agency to which the regional pass sales revenue was apportioned.
AMOUNT	Number	The amount of regional pass sales revenue distributed to the Agency for the validity month (in cents).
APPORTIONMENT_DATE	DateTime	Clearinghouse Settlement Date on which regional pass sales revenue was apportioned for the validity month.
INSTITUTION_ID	Number	The unique identifier of the Institution whose cardholders used the transit services with this product as payment method.
INSTITUTION_NAME	String	The name of the Institution whose cardholders used the transit services with this product as payment method.
PARTICIPANT_NAME	String	The name of the Agency to which the regional pass sales revenue was apportioned.
PRODUCT_CATEGORY_ID	Number	The product category of the product associated with the regional pass sale.
PRODUCT_DESC	String	The product associated with the regional pass sale.
SETTLEMENT_ACCT_ID	String	The unique identifier of the settlement account to which the regional pass sales revenue apportionment was posted.
VALIDITY_MMYY	DateTime	The calendar month and year for which the regional pass sales revenue was apportioned. This is the calendar month for which the regional pass was valid.

A.2.7   LIABILITY

The following table identifies the fields available in the LIABILITY view, which is used to source the Liability (Fiscal Agent) report.

Table 13. LIABILITY

Field Name	Format	Description
CARD_VOLUME	Number	The total number of active cards (non-blocked) with value as of the moment in time.
VALUE	Number	The total value on the active (non-blocked) cards as of the moment in time (in cents).

A.2.8   MANUAL_ADJUSTMENTS

The following table identifies the fields available in the MANUAL_ADJUSTMENTS view, which is used to source the Manual Adjustments (Fiscal Agent) report.

Table 14. MANUAL_ADJUSTMENTS

Field Name	Format	Description
ACCOUNT_TYPE_DESC	String	The description of the type of Settlement Account being affected by the manual adjustment.
ACCOUNT_TYPE_ID	Number	The unique identifier of the type of Settlement Account being affected by the manual adjustment.
ACCT_PARTICIPANT_ID	Number	The unique identifier of the participant associated with the Settlement Account affected by the manual adjustment.
ADJUSTMENT_DATE	DateTime	The date in which the settlement position has been included in an Automated Clearinghouse (ACH) file sent to the settlement bank.
ADJUSTMENT_ID	Number	Unique ID assigned to Manual Adjustment.
ADJUSTMENT_REASON_DESC	String	The descriptive reason for the manual adjustment.
ADJUSTMENT_REASON_ID	String	The unique identifier of the reason for the manual adjustment.
ADJUSTMENT_STATUS	String	A descriptive status of the adjustment transaction.
ADJUSTMENT_VALUE	Number	Value associated with the manual adjustment (in cents).
BANK_ACCT_NUMBER	String	Bank account number affected by the manual adjustment (formatted ****123).
COUNTERPARTY_ID	Number	The ID of the counterparty to the transaction. This is the participant that will receive an equal and opposite adjustment to their Settlement Account.
COUNTERPARTY_NAME	String	The descriptive name of the counterparty.
PARTICIPANT_ID	Number	ID of the participant affected by manual adjustment.
PARTICIPANT_NAME	String	The descriptive name of the participant.
PARTICIPANT_SET_ACCT_NAME	String	The participant associated with the Settlement Account affected by the manual adjustment.
SETTLEMENT_ACCT_ID	Number	Unique identifier of Settlement Account affected by the manual adjustment.
SETTLEMENT_DATE	DateTime	The date appended to each transaction as it is received at the Clearinghouse.
TXN_DATE	DateTime	The actual date of the transaction as it was captured by the device.
USER_ID	String	Login name of the person who made the adjustment.

A.2.9　NSF

The following tables identify the tables and fields available in the NSF view, which is used to source the NSF (Bad Check List and Automatic Revalue Program) report.

Table 15. AUTO_REVALUE_FAILURES

Field Name	Format	Description
AMOUNT	Number	The amount that was failed to be charged against the credit card (in cents).
CARDHOLDER_FIRSTNAME	String	The first name of the cardholder registered to the fare card (if applicable).
CARDHOLDER_LASTNAME	String	The last name of the cardholder registered to the fare card (if applicable).
CARDHOLDER_ID	Number	The unique ID of the holder of the fare card associated with the transaction (if applicable).
CC_REFERENCE	String	The internal reference to the credit card used to attempt to effect payment for the auto-revalue.
CSN	Number	The serial number of the fare card associated with the transaction.
REASON	String	The reason for the failure to obtain funds (e.g., unknown card, expired card, insufficient credit etc.).
TXN_DATE	DateTime	The calendar date of the transaction that resulted in a failure to obtain funds from a credit card.

Table 16. BAD_CHECK_OCCURRENCE

Field Name	Format	Description
BRANCH_ROUTING_NUMBER	Number	The branch routing number associated with the bad check.
CHECK_ACCT_NUMBER	Number	The account number associated with the bad check.
PARTICIPANT_ID	Number	The unique identifier of the Agency that entered the information into the Bad Check List.
PARTICIPANT_NAME	String	The descriptive name of the Agency that entered the information into the Bad Check List.
TXN_DATE	DateTime	The calendar date and time the bad check information was entered into the Bad Check List.

Table 17. NSF_EVENTS

Field Name	Format	Description
AMOUNT	Number	The amount associated with the NSF event (in cents)
CARDHOLDER_FIRSTNAME	String	The first name of the cardholder associated with the NSF transaction (if applicable)
CARDHOLDER_LASTNAME	String	The last name of the cardholder associated with the NSF transaction (if applicable)

Field Name	Format	Description
CARDHOLDER_ID	Number	The unique ID of the holder of the fare card associated with the NSF transaction (if applicable)
CHECK_NUMBER_CC	String	The check number or the last 4-digits of the credit card associated with the NSF event
CSN	Number	The unique card serial number associated with the NSF event
NSF_REASON	String	The reason for the NSF funds (e.g., Account Closed, Non-Sufficient Funds, Fraud, etc.)
NSF_TYPE	Number	Type of payment method used (Credit Card, check, etc.)
PARTICIPANT_ID	Number	The unique id of the participant for which the NSF funds were associated
PARTICIPANT_NAME	String	The name of the participant for which the NSF funds were associated
TXN_DATE	DateTime	The date the NSF event was captured by the system

A.2.10   PURSE_REALLOC

The following table identifies the fields available in the PURSE_REALLOC view, which is used to source the Purse Revenue Reallocation report.

Table 18. PURSE_REALLOC

Field Name	Format	Description
ACCOUNT_TYPE_DESC	String	The type of settlement account that will be affected by the reallocation of funds.
AMOUNT	Number	The amount that was debited or credited to the agency's settlement account.
PARTICIPANT_ID	Number	The unique identifier of the Agency subject to a re-allocation of funds paid from the Float Account to Agencies.
PARTICIPANT_NAME	String	The name of the Agency subject to a re-allocation of funds paid from the Float Account to Agencies.
REALLOCATION_DATE	DateTime	The Clearinghouse Settlement Date on which funds paid from the Float Account to Agencies was re-allocated across Agencies.
SETTLEMENT_ACCT_ID	String	The unique identifier of the settlement account that will be affected by the reallocation of funds.

A.2.11 RECOVERED_ADD_VALUE

The following table identifies the fields available in the RECOVERED_ADD_VALUE view, which is used to source the Recovered Add Value report.

Table 19. RECOVERED_ADD_VALUE

Field Name	Format	Description
AMOUNT	Number	The amount recovered from the load agent.
LOAD_AGENT_ID	Number	The unique identifier of the Agency that sold the product associated with the recovered add value.
LOAD_AGENT_NAME	String	The name of the Agency that sold the product associated with the recovered add value.
PRODUCT_CATEGORY_DESC	String	The product category associated with the recovered add value.
PRODUCT_DESC	String	The product associated with the recovered add value.
PRODUCT_ISSUER_ID	Number	The unique identifier of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	String	The name of the Agency that issues the product that was sold.
SETTLEMENT_DATE	DateTime	The settlement date on which the add value transactions were recovered.
TXN_DESC	String	The description of the transaction associated with the recovered add value.

A.2.12 REG_PASS_APPORT

The following table identifies the fields available in the REG_PASS_APPORT view, which is used to source the Regional Pass Revenue Apportionment report.

Table 20. REG_PASS_APPORT

Field Name	Format	Description
ACCOUNT_TYPE_DESC	String	The description of the type of settlement account to which regional pass sales revenue apportionment was posted.
AGENCY_ID	Number	The unique identifier of the Agency to which regional pass sales revenue was apportioned.
AMOUNT	Number	The amount of regional pass sales revenue distributed to the Agency for the validity month (in cents).
APPORTIONMENT_DATE	DateTime	Clearinghouse Settlement Date on which Regional pass sales revenue was apportioned for the validity month.
PARTICIPANT_NAME	String	The name of the Agency to which regional pass sales revenue was apportioned.
PRODUCT_CATEGORY_ID	Number	The product category associated with the regional pass sales revenue apportionment.
PRODUCT_DESC	String	The product associated to the regional pass sales revenue apportionment.

Field Name	Format	Description
SETTLEMENT_ACCT_ID	Number	The unique identifier of the settlement account to which regional pass sales revenue apportionment was posted.
VALIDITY_MMYY	DateTime	The calendar month and year for which regional pass sale revenue was apportioned. This is the calendar month for which the regional pass was valid.

A.2.13   RETAIL_SALES

The following table identifies the fields available in the RETAIL_SALES view, which is used to source the Daily Sales by Retailer report.

Table 21. RETAIL_SALES

Field Name	Format	Description
CSN	Number	The Card Serial Number associated with the sales transaction.
OPERATOR_ID	Number	The person credited with making the sale.
PAYMENT_AMOUNT	Number	The amount associated with the payment method of the transaction (in cents).
PAYMENT_METHOD_DESC	String	The method by which product sales were affected (e.g., cash, credit card).
PAYMENT_METHOD_ID	Number	The unique identifier associated with the payment method used for the sales transaction.
PAYMENT_RATIO	Number	If multiple payment methods are used for one receipt number, this is the percentage of the payment amount to apply to this payment method.
PRODUCT_DESC	String	The product associated with the sale.
RECEIPT_NUMBER	Number	The receipt number of the sales transaction - used for grouping all line items/payment methods/amounts for a transaction.
RETAILER_ID	Number	The unique identifier associated with the Retailer who made the sale.
RETAILER_NAME	String	The name of the Retailer associated with the sale.
SALES_LOCATION	String	The description of the Retailer location at which a product was sold.
TXN_DATE	DateTime	The calendar date on which the transaction was made.
TXN_DESC	String	The detailed description of the type of sales transaction taking place.

A.2.14 SALES

The following table identifies the fields available in the SALES view, which is used to source the following reports:

- Daily Sales by Participant

- Daily Sales by Product

- Daily Post Payment Automatic Revalue

- Daily Sales by Payment Type

Table 22. SALES

Field Name	Format	Description
~~LOAD_AGENT~~PARTICIPANT_ID	Number	The unique identifier of the participant acting as Load Agent that made the sale.~~The unique identifier of the participant that made the sale.~~
PARTICIPANT_NAME	String	The name of the load agent that made the sale.
PAYMENT_AMOUNT	Number	The amount associated with the payment method of the transaction (in cents).
PAYMENT_METHOD_DESC	String	The method by which product sales were affected.
PAYMENT_METHOD_ID	Number	The unique identifier of the method by which product sales were affected.
PAYMENT_RATIO	Number	If multiple payment methods are used for one receipt number, this is the percentage of the payment amount to apply to this payment method.
PROD_ISS_PART_NAME	String	The name of the Agency that issues the product that was sold.
PRODUCT_DESC	String	The product that was sold.
PRODUCT_ISSUER_ID	Number	The unique identifier of the Agency that issues the product that was sold.
RECEIPT_NUMBER	Number	The receipt number of the sales transaction - used for grouping all line items/payment methods/amounts for a transaction.
RECONCILIATION_DATE	DateTime	The date appended to each transaction at the BOC as it is sent to the Clearinghouse.
SALES_CHANNEL	String	The description of the sales channel through which the products were sold (e.g., Walk-In Center).
SALES_LOCATION	String	The description of the location at which a product was sold.
SETTLEMENT_DATE	DateTime	The date appended to each transaction as it is received at the Clearinghouse. This is the Settlement day against which the account entry is to be posted.
SIGN	Number	Identifies the sales transaction as a debit or credit
TXN_DATE	DateTime	The calendar date on which the transaction was made.

Field Name	Format	Description
TXN_DESC	String	The description of the transaction associated with the product sale.

A.2.15 SETTLEMENT_POSITIONS_AGENCIES

The following table identifies the fields available in the SETTLEMENT_POSITIONS_AGENCIES view, which is used to source the Settlement Positions (Agencies, Lead Agencies, Retailers, ARM) report.

Table 23. SETTLEMENT_POSITIONS_AGENCIES

Field Name	Format	Description
ACCOUNT_TYPE_DESC	String	A description of the settlement account in which the settlement transaction is associated.
ACCOUNT_TYPE_ID	String	A unique identifier of the settlement account in which the settlement transaction is associated.
AUTHORIZED	String	An indication of whether the settlement position has been authorized (Yes/No).
BANK_ACCT_NUMBER	String	The physical bank account against which the entry is posted. Format as ****123.
EFFECTED	String	An indication of whether the settlement position has been included in an Automated Clearinghouse (ACH) file sent to the settlement bank. (Yes/No).
LEAD_AGENCY_ID	Number	The unique identifier of the participant designated as the Lead Agency in associated with an Institutional agreement.
LEAD_AGENT_NAME	String	The name of the participant designated as the Lead Agency in associated with an Institutional agreement.
NET_AMOUNT	Number	The net amount of the settlement position (in cents).
PARTICIPANT_ID	Number	Unique identifier of the participant associated with the position.
PARTICIPANT_NAME	String	Name of the participant associated with the position.
ROLE_ID	Number	The unique identifier of the role in which the participant takes in the settlement transaction (e.g., Agency, Retailer, ARM).
SETTLEMENT_ACCT_ID	Number	The unique identifier of the Clearinghouse settlement account against which each entry will be posted.
SETTLEMENT_DATE	DateTime	The date appended to each transaction as it is received at the Clearinghouse. This is the Settlement day against which the account entry is to be posted.
SIGN	Number	Identifies the sales transaction as a debit or credit
TXN_DESC	String	The description of the transaction associated with the settlement.

Field Name	Format	Description
TXN_SUBTYPE	Number	The unique identifier of the sub-type of the settled transaction.
TXN_TYPE	Number	The unique identifier of the type of settled transaction.
VOLUME	Number	The number of transactions associated with the settlement summary.

A.2.16   SETTLEMENT_POSITIONS_FA

The following table identifies the fields available in the SETTLEMENT_POSITIONS_FA view, which is used to source the following reports:

- Settlement Position (Fiscal Agent)

- Net Settlement Positions (Fiscal Agent)

Table 24. SETTLEMENT_POSITIONS_FA

Field Name	Format	Description
ACCOUNT_ID	String	The unique identifier of the Clearinghouse settlement account against which each entry will be posted.
ACCOUNT_TYPE_DESC	String	A description of the settlement account in which the settlement transaction is associated.
ACCOUNT_TYPE_ID	String	A unique identifier of the settlement account in which the settlement transaction is associated.
AUTHORIZED	String	An indication of whether the settlement position has been authorized (Yes/No).
BANK_ACCT_NUMBER	String	The physical bank account against which the entry is posted. Format as ****123.
EFFECTED	String	An indication of whether the settlement position has been included in an Automated Clearinghouse (ACH) file sent to the settlement bank. (Yes/No)
NET_AMOUNT	Number	The net amount of the settlement position (in cents).
PARTICIPANT_ID	Number	Unique identifier of the participant associated with the position.
PARTICIPANT_NAME	String	Name of the participant associated with the position.
SETTLEMENT_DATE	DateTime	The date appended to each transaction as it is received at the Clearinghouse. This is the Settlement day against which the account entry is to be posted.
SIGN	Number	Identifies the sales transaction as a debit or credit
TXN_DESC	String	The description of the transaction associated with the settlement.
TXN_SUBTYPE	Number	The unique identifier of the sub-type of the settled transaction.

Field Name	Format	Description
TXN_TYPE	Number	The unique identifier of the type of settled transaction.
VOLUME	Number	The number of transactions associated with the settlement summary.

A.2.17   TRANSACTION_SUMMARY

The following table identifies the fields available in the TRANSACTION_SUMMARY view, which is used to source the Transaction Summary by Reconciliation Date report.

Table 25. TRANSACTION_SUMMARY

Field Name	Format	Description
DEST_PARTICIPANT_ID	Number	The unique identifier of the destination participant for the summary.
DESTINATION_PARTICIPANT_NAME	String	The name of the destination participant for the summary.
GFS_AMTOUNT	Number	The good for settlement value for the summary (in cents).
GFS_VOL	Number	The good for settlement volume for the summary.
NGFS_AMT	Number	The not good for settlement value for the summary (in cents).
NGFS_VOL	Number	The not good for settlement volume for the summary.
RECONCILIATION_DATE	DateTime	The reconciliation date for the summary.
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the service participant for the summary.
SERVICE_PARTICIPANT_NAME	String	The name of the service participant for the summary.
SETTLEMENT_DATE	DateTime	The date appended to each transaction as it is received at the Clearinghouse. This is the Settlement day against which the account entry is to be posted.
SIGN	Number	Identifies the sales transaction as a debit or credit
TXN_DESC	String	The description of the transaction associated with the summary.
TXN_SUBTYPE	Number	The unique identifier of the sub-type of the summarized transaction.
TXN_TYPE	Number	The unique identifier of the type of the summarized transaction.

A.2.18   TXN_SUMMARY_TXN_DATEDETAILS

The following table identifies the fields available in the TXN_SUMMARY_DETAILS view, which is used to source the Transaction Summary by Settlement Date report.

Table 26. TXN_SUMMARY_DETAILS

Field Name	Format	Description
DEST _PARTICIPANT _ID~~DEST PARTICIPANT ID~~	Number~~Number~~	The unique identifier of the destination participant for the summary.~~The unique identifier of the destination participant for the summary.~~
DESTINATION _PARTICIPANT _NAME~~DEST PART NAME~~	String~~String~~	The name of the destination participant for the summary.~~The name of the destination participant for the summary.~~
GFS_AMT~~SERVICE_PARTICIPANT_ID~~	Number~~Number~~	The good for settlement value for the summary (in cents).~~The unique identifier of the service participant for the summary.~~
GFS_VOL~~SERVICE_PARTICIPANT_NAME~~	Number~~String~~	The good for settlement volume for the summary.~~The name of the service participant for the summary.~~
NGFS_AMT~~TXN_DESC~~	Number~~String~~	The not good for settlement value for the summary (in cents).~~The description of the transaction associated with the summary.~~
NGFS_VOL~~GFS_AMT~~	Number~~Number~~	The not good for settlement volume for the summary.~~The good for settlement value for the summary (in cents).~~
SERVICE_PARTICIPANT_ID~~GFS_VOL~~	Number~~Number~~	The unique identifier of the service participant for the summary.~~The good for settlement volume for the summary.~~
SERVICE_PARTICIPANT_NAME~~NGFS_AMT~~	String~~Number~~	The name of the service participant for the summary.~~The not good for settlement value for the summary (in cents).~~
SETTLEMENT_DATE~~NGFS_VOL~~	DateTime~~Number~~	The date the transaction was settled.~~The not good for settlement volume for the summary.~~
SIGN~~TXN_DATE~~	Number~~DateTime~~	Identifies the sales transaction as a debit or credit~~The transaction date associated with the settlement transaction.~~
TXN_DATE~~SETTLEMENT_DATE~~	DateTime~~DateTime~~	The transaction date associated with the settlement transaction.~~The date the transaction was settled.~~
TXN_DESC	String	The description of the transaction associated with the summary.
TXN_SUBTYPE	Number	The unique identifier of the sub-type of the summarized transaction.
TXN_TYPE	Number	The unique identifier of the type of the summarized transaction.

A.3   General Management

The following Business Views are associated with the General Management reports.

A.3.1   BLOCKED_CARDS

The following table identifies the fields available in the BLOCKED_CARDS view, which is used to source the Blocked Cards report.

Table 27. BLOCKED_CARDS

Field Name	Format	Description
BLOCK_REASON_DESC	String	The descriptive reason the card was blocked.
BLOCK_REASON_ID	Number	The unique identifier as to the reason the card was blocked.
BLOCKED_DATE	DateTime	The date the card was blocked.

Field Name	Format	Description
CSN	Number	The card serial number of the card being blocked.

A.3.2   DEVICE_RELIABILITY

The following tables identify the tables and fields available in the DEVICE_RELIABILITY view, which is used to source the Device Reliability report.

Table 28. DEVICE_RELIABILITY

Field Name	Format	Description
DEVICE_ID	String	The unique value (serial number) associated with the device.
DEVICE_STATUS_DESC	String	The description of the device status (e.g., In Service).
DEVICE_STATUS_ID	Number	The unique identifier of the device status.
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
FAILURES	Number	The total chargeable failures recorded against the device on the status date.
LOCATION	String	The install location of the device.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
STATUS_DATE	DateTime	The date which the reliability data is obtained.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TXNS_PRIOR_FAIL	Number	The total number of transactions that took place since the most recent failure on the device.

Table 29. DEVICE_RELIABILITY_TXNS

Field Name	Format	Description
DEVICE_ID	String	The unique value (serial number) associated with the device.
TRANSACTIONS	Number	The total number of transactions recorded against the device on the txn date.
TXN_DATE	DateTime	The date in which transactions are being counted.

A.3.3   DEVICE_STATUS_AVAIL

The following table identifies the fields available in the DEVICE_STATUS_AVAIL view, which is used to source the Device Status and Availability report.

Table 30. DEVICE_STATUS_AVAIL

Field Name	Format	Description
AVAILABILITY	Number	The calculated availability for the status date.
DEVICE_ID	String	The unique value (serial number) of the specific device in which availability is being calculated.
DEVICE_STATUS_DESC	String	The description of the device status (e.g., In Service).
DEVICE_STATUS_ID	Number	The unique identifier of the device status.
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
LOCATION	String	The install location of the device.
OOS_HOURS	Number	The total number of out of service hours for the status date.
OPERATING_HOURS	Number	The total number of operating hours for the status date.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
STATUS_DATE	DateTime	The date which the availability data is obtained.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.

A.3.4   FARE_CARD_RELIABILITY

The following tables identify the tables and fields available in the FARE_CARD_RELIABILITY view, which is used to source the Fare Card Reliability report.

Table 31. FARE_CARD_RELIABILITY_MAIN

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the card type over which the reliability data is gathered.
CARD_TYPE_ID	String	The unique identifier of the card type over which the reliability data is gathered.

Table 32. FARE_CARD_RELIABILITY_DAMAGED

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the card type over which the reliability data is gathered.
CARD_TYPE_ID	String	The unique identifier of the card type over which the reliability data is gathered.
CSN	Number	The card serial number associated with the damaged card.
RELIABILITY_DATE	DateTime	The date of which the reliability statistics are being calculated.

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Field Name	Format	Description
TXN_COUNT	Number	The total number of transactions recorded against the damaged card on the reliability date.

Table 33. FARE_CARD_RELIABILITY_DEFECT_POST

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the card type over which the reliability data is gathered.
CARD_TYPE_ID	String	The unique identifier of the card type over which the reliability data is gathered.
CSN	Number	The serial number of the issued card that was reported defective on the reliability date.
RELIABILITY_DATE	DateTime	The date of which the reliability statistics are being calculated.
TXN_COUNT	Number	The number of transactions recorded against the DEFECT_COUNT_POST cards.

Table 34. FARE_CARD_RELIABILITY_DEFECT_PRE

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the card type over which the reliability data is gathered.
CARD_TYPE_ID	String	The unique identifier of the card type over which the reliability data is gathered.
DEFECT_COUNT	Number	The count of non-issued cards that were reported defective on the reliability date.
RELIABILITY_DATE	DateTime	The date of which the reliability statistics are being calculated.

Table 35. FARE_CARD_RELIABILITY_USAGE

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the card type over which the reliability data is gathered.
CARD_TYPE_ID	String	The unique identifier of the card type over which the reliability data is gathered.
CSN	Number	The card serial number associated with the card in use.
RELIABILITY_DATE	DateTime	The date of which the reliability statistics are being calculated.
TXN_COUNT	Number	The total number of transactions recorded against the card with usage on the reliability date.

A.3.5   SYSTEM_UTILIZATION

The following table identifies the fields available in the SYSTEM_UTILIZATION view, which is used to source the System Utilization report.

Table 36. SYSTEM_UTILIZATION

Field Name	Format	Description
DAC_ID	String	The ID of the DAC through which the transaction was uploaded.
DEVICE_ID	String	The unique identifier of the specific device in which utilization is being calculated.
DEVICE_TYPE_ID	String	The description of the type of device that can be utilized.
PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
STATUS_DATE	DateTime	The date of which the system utilization data is being counted.
TRANSACTIONS	Number	The total number of transactions for device on status date.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.

A.4   Institutional

The following Business Views are associated with the Institutional reports.

A.4.1   EXPIRED_VOUCHERS

The following table identifies the fields available in the EXPIRED_VOUCHERS view, which is used to source the Expired Vouchers report.

Table 37. EXPIRED VOUCHERS

Field Name	Format	Description
BRANCH	String	The branch of the institution associated with the card making the transaction.
CSN	Number	The unique Card Serial Number associated with the voucher.
CSN_COUNT	Number	The number of CSNs in the CSN_LIST field
CSN_LIST	String	The list of CSNs associated with the voucher. If only one CSN applies, this field will be the same as "CSN".
INSTITUTION_ID	Number	The unique identifier of the institution associated with the card making the transaction.
INSTITUTION_NAME	String	The name of the institution associated with the card making the transaction.
LEAD_AGENCY_ID	Number	The unique identifier of the lead agency associated with the Institution ID.
LOAD_AGENT_NAME	String	The name of the Agency that issued the product for the voucher.
~~PROD_ISSR_PART_NAME~~	~~String~~	~~The ID of the Agency that issued the product for the voucher.~~

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Field Name	Format	Description
PRODUCT_DESC	String	The description of the product associated with the card making the transaction.
VOUCHER_PERIOD	String	The month and year that the voucher was valid, but not used.
VOUCHER_ACTIVITY	String	The activity (Autoload or Remote Revalue) necessary to redeem the voucher.
VOUCHER_AMOUNT	Number	The value associated with the expired voucher (in cents).
VOUCHER_DATE	DateTime	The date and time that the voucher was valid, but not used (note that day portion holds no value).

A.4.2   INST_BILLING

The following tables identify the tables and fields available in the INST_BILLING view, which is used to source the Institutional Billing report.

Table 38. INST_BILLING_ALL

Field Name	Format	Description
BRANCH_NAME	String	The description of the Branch associated with the Institution.
CONTRACT_START	DateTime	The date and time the contract is active and in effect for an Institution
CONTRACT_END	DateTime	The last day the contract will be in effect for an Institution. Displays date and time.
INSTITUTION_ID	Number	The ID of the Institution for which the billing is taking place.
INSTITUTION_NAME	String	The name of the Institution for which the billing is taking place.
LEAD_AGENCY_ID	Number	The unique identifier associated with the Lead Agency of the institution.
LEAD_AGENT_NAME	String	The name of the Lead Agency of the institution.
PROGRAM_TYPE_ID	Number	The unique identifier to the applicable program type associated with the Institution.
TXN_DATE	DateTime	The date of the Institution being billed (detail level).

Table 39. INST_BILLING_OTHER

Field Name	Format	Description
BRANCH	String	The description of the Branch associated with the Institution.
BILLING_MMYY	DateTime	The Month/Year that indicates the month being billed.
CARD_COUNT	Number	The number of cards associated with the billing cycle.

Field Name	Format	Description
CARD_GROUP_ID	Number	The unique card group associated with the Institution to which the transactions are being billed
CARD_SERIAL_NUMBER	Number	The unique serial number associated with the card making the transaction
CONTRACT_START	DateTime	The date and time the contract is active and in effect for an Institution
CONTRACT_END	DateTime	The last day the contract will be in effect for an Institution. Displays date and time.
DELIVERY_METHOD	String	Remote or Automatic delivery of the transaction. (discussion still open on "draw-down")
INST_ORDER_ID	Number	The order number associated with the card transactions (does not apply to WSF Commercial Account Program).
INSTITUTION_ID	Number	The ID of the Institution for which the card is associated and billing will take place.
INSTITUTION_NAME	String	The name of the Institution for which the card is associated and billing will take place.
LEAD_AGENCY_ID	Number	The unique identifier associated with the Lead Agency of the institution.
LEAD_AGENT_NAME	String	The name of the Lead Agency of the institution.
PRODUCT_DESC	String	The description of the product associated with the billing transaction(s).
PROGRAM_TYPE_DESC	String	The name of the applicable program type associated with the transaction.
PROGRAM_TYPE_ID	Number	The unique identifier to the applicable program type associated with the transaction.
REDEEMED	String	Yes or No value to indicate if the product has been redeemed.
TXN_AMOUNT	Number	The actual transaction amount in cents (prior to apportionment).
TXN_DATE	DateTime	The date of the transaction(s) being billed (detail level).

Table 40. INST_BILLING_BP

Field Name	Format	Description
BILLING_MMYY	DateTime	The Month/Year that indicates the month being billed.
BILLING_TYPE	String	The billing type associated with the invoice to the institution for right to ride program usage.
BRANCH	String	The description of the Branch associated with the Institution.
CARD_COUNT	Number	The number of cards used on the transaction date.

Field Name	Format	Description
CONTRACT_START	DateTime	The date and time the contract is active and in effect for an Institution.
CONTRACT_END	DateTime	The last day the contract will be in effect for an Institution. Displays date and time.
INSTITUTION_ID	Number	The ID of the Institution associated with the card usage for which billing will take place.
INSTITUTION_NAME	String	The name of the Institution associated with the card usage for which billing will take place.
LEAD_AGENCY_ID	Number	The unique identifier associated with the Lead Agency of the institution.
LEAD_AGENT_NAME	String	The name of the Lead Agency of the institution.
TXN_AMOUNT	Number	The total transaction value (prior to apportionment) on the transaction date (in cents).
TXN_COUNT	Number	Always 1

A.4.3   INST_CARD_ACCT_TXN_HISTORY

The following table identifies the fields available in the INST_CARD_ACCT_TXN_HISTORY view, which is used to source the Institutional Card Account Transaction History report.

Table 41. INST_CARD_ACCT_TXN_HISTORY

Field Name	Format	Description
ADD_VALUE_AMOUNT	Number	The amount added to an Institutional card if add value transaction
BRANCH	String	The description of the Branch associated with the Institution.
~~CEFFV~~CASH_FARE_PAYABLE	Number	If transaction is a cash fare, the dollar amount billed off the card from ePurse balance. This value is used to populate the "Fare Payment" field in the Institutional Card Account Transaction History report. This is the value deducted from the ePurse balance. ~~The cash equivalent full fare value associated with the fare payment – not necessarily the amount debited from the card.~~
CSN	Number	The unique Card Serial Number associated with the transaction.
DEVICE_TYPE_ID	Number	The unique identifier of the type of device in which the transaction was captured.
INSTITUTION_ID	Number	The unique identifier of the institution associated with the card making the transaction.
INSTITUTION_NAME	String	The name of the institution associated with the card making the transaction.
LEAD_AGENCY_ID	Number	The unique identifier associated with the Lead Agency of the institution.

Field Name	Format	Description
LEAD_AGENT_NAME	String	The name of the Lead Agency of the institution.
LOCATION	String	Location of the device where the transaction was created.
~~MODE_ID~~	~~Number~~	~~The unique identifier associated with the type of transportation used in association with the transaction.~~
MODE_DESCRIPTION	String	The description of the type of transportation used in association with the transaction.
ORIGINAL_PARENT_ROUTE_ID	String	The specific route id in which the transaction took place.
PASSENGER_TYPE_DESC	String	The description of the passenger type associated with the product/card.
PRODUCT_DESC	String	The description of the product associated with the transaction.
PROGRAM_CATEGORY	String	The program associated with the Institutional agreement (e.g., Commercial Account).
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SIGN	Number	Identifies the sales transaction as a debit or credit
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TOTAL_CASH_EQUIVALENT_VALUE	Number	Cash equivalent full fare value associated with the transaction.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
~~TXN_AMOUNT~~	~~Number~~	~~The amount of the transaction (in cents).~~
TXN_DATE	DateTime	The business date and time (MM/DD/YY HH:MM:SS) associated with the transaction.
TXN_DESC	String	The descriptive name of the transaction.
VOUCHER_PAYMENT	String	Was the transaction a voucher? (Yes/No)

A.4.4   INST_CARD_STATUS

The following table identifies the fields available in the INST_CARD_STATUS view, which is used to source the Institutional Card Status report.

Table 42. INST_CARD_STATUS

Field Name	Format	Description
BRANCH	String	If the card is an institutional card, Branch name of the associated Institution.
CARD_STATUS	String	The current status of the card within the current month (card can only be one status).
CARDHOLDER_FIRSTNAME	String	If the card is a linked card, the first name of the primary cardholder.
CARDHOLDER_LASTNAME	String	If the card is a linked card, the last name of the primary cardholder.
CSN	Number	The serial number of the card.
INSTITUTION_ID	Number	The unique identifier of the Institution that owns the card.
INSTITUTION_NAME	String	The name of the Institution that owns the card.
LEAD_AGENT_ID	Number	The unique identifier of the Lead Agency associated with the Institution that owns the card.
LEAD_AGENT_NAME	String	The name of the Lead Agency associated with the Institution that owns the card.

A.4.5   INST_LINKED_RS

The following tables identify the tables and fields available in the INST_LINKED_RS view, which is used to source the Institutional Linked Ridership Summary report.

Table 43. INST_LINKED_RS_ALL

Field Name	Format	Description
BRANCH	String	The description of the Branch associated with the Institution.
CT	Number	1 if a leg of the trip was using CT as a service participant. 0 if not true.
ET	Number	1 if a leg of the trip was using ET as a service participant. 0 if not true.
INSTITUTION_ID	Number	The unique identifier of the institution associated with the Linked Trip.
INSTITUTION_NAME	String	The name of the institution associated with the Linked Trip.
KCM	Number	1 if a leg of the trip was using KCM as a service participant. 0 if not true.
KT	Number	1 if a leg of the trip was using KT as a service participant. 0 if not true.
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agent associated with the Institution of the linked trip.
LEAD_AGENT_NAME	String	The name of the Lead Agent associated with the Institution of the linked trip.
LINKED_TRIP_DATE	DateTime	The calendar date of the Linked Trip.

Field Name	Format	Description
LINKED_TRIP_FARE	Number	The highest CEFFV associated with any leg in the Linked Trip.
LINKED_TRIP_ID	Number	The unique identifier for a Linked Trip.
PT	Number	1 if a leg of the trip was using PT as a service participant. 0 if not true.
ST	Number	1 if a leg of the trip was using ST as a service participant. 0 if not true.

Table 44. INST_LINKED_RS_WSF

Field Name	Format	Description
BRANCH	String	The description of the Branch associated with the Institution.
INSTITUTION_ID	Number	The unique identifier of the institution associated with the Linked Trip.
INSTITUTION_NAME	String	The name of the institution associated with the Linked Trip.
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agent associated with the Institution of the linked trip.
LEAD_AGENT_NAME	String	The name of the Lead Agent associated with the Institution of the linked trip.
LINKED_TRIP_DATE	DateTime	The calendar date of the Linked Trip.
LINKED_TRIP_FARE	Number	The highest CEFFV associated with any leg in the Linked Trip (in cents).
LINKED_TRIP_ID	Number	The unique identifier for a Linked Trip.
WSF	Number	1 if a leg of the trip was using WSF as a service participant. 0 if not true (only include rows where WSF = 1)

A.4.6   INST_UNLINKED_RS

The following table identifies the fields available in the INST_UNLINKED_RD view, which is used to source the Institutional Unlinked Ridership Summary report.

Table 45. INST_UNLINKED_RS

Field Name	Format	Description
BRANCH	String	The description of the Branch associated with the Institution.
CEFFV	Number	The cash equivalent full-fare value of the transaction (in cents)
CSN	Number	The card serial number associated with the Unlinked Trip
INSTITUTION_ID	Number	The unique identifier of the institution associated with the Linked Trip.
INSTITUTION_NAME	String	The name of the institution associated with the Linked Trip.

Field Name	Format	Description
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agent associated with the Institution of the unlinked trip
LEAD_AGENCY_NAME	String	The name of the Lead Agent associated with the Institution of the unlinked trip
MODE ID	Number	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESCRIPTION	String	The description of the type of transportation used in association with the transaction
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TXN_DATE	DateTime	The business date of the Unlinked Trip.

A.4.7 PART_FARE_MEDIA_SUMMARY

The following tables identify the tables and fields available in the PART_FARE_MEDIA_SUMMARY view, which is used to source the Participant Fare Media Summary report.

Table 46. PART_FARE_MEDIA_DETAIL

Field Name	Format	Description
APP_VALUE	Number	The summary apportioned value received by the service participant for the transaction type and date (in cents).
BRANCH	String	The description of the Branch associated with the Institution.
CARD_COUNT	Number	The number of times the product was used on the transaction date.
CEFFV	Number	The summary cash equivalent full fare value for the transaction type and date (in cents).
INSTITUTION_ID	Number	The ID of the Institution associated with the card usage for which billing will take place.
INSTITUTION_NAME	String	The name of the Institution associated with the card usage for which billing will take place.
PARTICIPANT_ID	Number	The unique identifier of the Agency that issued the product associated with the reval/usage transaction.
PRODUCT_DESC	String	The description of the product associated with the card usage/revalue.

Field Name	Format	Description
PROGRAM_TYPE_DESC	String	The name of the type of program (voucher, customized, etc.) for which the billing is associated.
PROGRAM_TYPE_ID	Number	The unique id of the type of program for which the billing is associated.
REVAL_OR_USE	String	Indicates if the card transactions were a Revalue or Usage by containing REVALUE or USE.
REVAL_PARTICIPANT_NAME	String	The name of the Agency that issued the product associated with the reval/usage transaction.
TXN_DATE	DateTime	The calendar date and time of the card transactions.

Table 47. PART_FARE_MEDIA_SUMMARY

Field Name	Format	Description
BLOCK_LEAD_AGENT_NAME	String	The name of the lead agent associated with the Institution ID.
BRANCH	String	The description of the Branch associated with the Institution.
CARD_COUNT	Number	The summarized number of issued/blocked cards associated with the transaction date.
INSTITUTION_ID	Number	The ID of the Institution associated with the issued/blocked card.
INSTITUTION_NAME	String	The name of the Institution associated with the issued/blocked card.
ISSUED_OR_BLOCKED	String	Indicates if the card was issued or blocked by containing the value ISSUE or BLOCK.
LEAD_AGENT_ID	Number	The unique identifier of the lead agent associated with the Institution ID.
TXN_DATE	DateTime	The calendar date of the summarized issued/blocked cards (daily summary).

A.4.8   UNREDEEMED_PRODUCTS

The following table identifies the fields available in the UNREDEEMED_PRODUCTS view, which is used to source the Unredeemed Products report.

Table 48. UNREDEEMED_PRODUCTS

Field Name	Format	Description
BRANCH	String	The branch of the institution associated with the card making the transaction.
CSN	Number	The unique Card Serial Number associated with the transaction.
EXPIRATION_DATE	DateTime	The date that the product is no longer valid for the purpose of delivery. (date actionlist expired or the end of the order month in which autorevalue is valid)

Field Name	Format	Description
INSTITUTION_ID	Number	The unique identifier of the institution associated with the card making the transaction.
INSTITUTION_NAME	String	The name of the institution associated with the card making the transaction.
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agency associated with the Institution.
LEAD_AGENT_NAME	String	The name of the Lead Agency associated with the Institution.
PRODUCT_DESC	String	The description of the product that was not redeemed.
PRODUCT_VALUE	Number	The value of the expired product at the time of expiration (in cents).

A.4.9   INST_VANPOOL_SUBSIDY

The following table identifies the fields available in the INST_VANPOOL_SUBSIDY view, which is used to source the ~~following reports:~~

Institutional Vanpool Subsidy Status report.

- ~~Vanpool Subsidy Status~~

Table 49. INST_VANPOOL_SUBSIDY

Field Name	Format	Description
~~AGENCY_CONTRIBUTION~~	~~Number~~	~~The fare contributed by the agency for the vanpool usage. (This field is only populated if NOT associated with an Institution.)~~
~~AGENCY ID~~	~~Number~~	~~The unique identifier of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.~~
BRANCH	String	The branch of the institution associated with the card making the transaction. Only applies if the transaction is associated with an Institution.
CH_CONTRIBUTION	Number	The fare contributed by the cardholder for the vanpool usage.
CSN	Number	The unique Card Serial Number associated with the vanpool transaction.
INST_CONTRIBUTION	Number	The fare contributed by the institution for the vanpool usage - based on the institutional agreement (will not be more than the cost of the pass). (This field is only populated when transaction associated with an Institution.)
INSTITUTION_ID	Number	The unique identifier of the institution associated with the vanpool transaction. Only applies if the transaction is associated with an Institution.
INSTITUTION_NAME	String	The name of the institution associated with the vanpool transaction. Only applies if the transaction is associated with an Institution.

Field Name	Format	Description
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agency associated with the Institution.
LEAD_AGENT_NAME	String	The name of the Lead Agency associated with the Institution.
PRODUCT_DESC	String	The description of the product that was not redeemed.
PRODUCT_ID	Number	The unique identifier of the type of product used.
PRODUCT_ISSUER_ID	Number	The unique identifier of the Agency that issues the product.
TXN_DATE	DateTime	The date/time (mm/dd/yyyy hh:mm:ss) of the vanpool pass purchase transaction.
VANPOOL_AGENCY_NAME	String	The name of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
VANPOOL_DESC	String	The description of the agency vanpool.
VANPOOL_ID	Number	The unique identifier of the agency vanpool.

A.4.10　INST_VANPOOL_USAGE

The following table identifies the fields available in the INST_VANPOOL_USAGE view, which is used to source the following reports:

Institutional Vanpool Usage report.

- Vanpool Usage

Table 50. INST_VANPOOL_USAGE

Field Name	Format	Description
AGENCY_ID	Number	The unique identifier of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
BRANCH	String	The branch of the institution associated with the card making the transaction.
CSN	Number	The unique Card Serial Number associated with the vanpool transaction.
FARE_AMOUNT	Number	The amount (before apportionment) associated with the vanpool ride for that day. (not necessarily the amount paid) (in cents)
INSTITUTION_ID	Number	The unique identifier of the institution associated with the vanpool transaction. Only applies if the transaction is associated with an Institution.
INSTITUTION_NAME	String	The name of the institution associated with the vanpool transaction. Only applies if the transaction is associated with an Institution.
LEAD_AGENCY_ID	Number	The unique identifier of the Lead Agency associated with the Institution

Field Name	Format	Description
LEAD_AGENCY_NAME	String	The name of the Lead Agency associated with the Institution.
PRODUCT_DESC	String	The description of the product that was not redeemed.
PRODUCT_ID	Number	The unique identifier of the type of product used.
PRODUCT_ISSUER_ID	Number	The unique identifier of the Agency that issues the product.
TXN_DATE	DateTime	The date/time (mm/dd/yyyy hh:mm:ss) of the vanpool usage transaction.
VANPOOL_AGENCY_NAME	String	The name of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
VANPOOL_DESC	String	The description of the agency vanpool.
VANPOOL_ID	Number	The unique identifier of the agency vanpool.

A.5   Card Management

The following Business Views are associated with the Card Management reports.

A.5.1   CARD_INVENTORY

The following table identifies the fields available in the CARD_INVENTORY and CARD_INVENTORY_LOCATION views, which are used to source the Card Inventory report.

Table 51. CARD_INVENTORY

Field Name	Format	Description
ASSET_PARTICIPANT_ID	Number	The unique identifier of the Asset Participant.
ASSET_PARTICIPANT_NAME	String	The agency that owns the location in which the card is currently stocked.
CARD_STATUS_DESC	String	The current status of the card such as damaged, destroyed, defective, etc. (excluding DESTROYED cards).
CARD_STATUS_ID	Number	The unique identifier of the current status of the card.
CARD_TYPE_DESC	String	The description of the physical card type.
CSN	StringNumber	The unique serial number associated with the card.
GLOBAL_NAME	String	The agency identifier of the inventory location.
LOCATION	String	The location in which the card is inventoried.
PASSENGER_TYPE_DESC	String	The description of the passenger type associated with the card (e.g., adult, child, senior, etc.) if applicable.
PLACE_ID	String	The unique identifier for the inventory location.

Table 52: CARD_INVENTORY_LOCATION

Field Name	Format	Description
GLOBAL_NAME	String	The agency identifier of the inventory location.
LOCATION_NAME	String	The location in which the card is inventoried.
PLACE_ID	String	The unique identifier for the inventory location.

A.5.2   CARD_ORDER_STATUS

The following table identifies the fields available in the CARD_ORDER_STATUS view, which is used to source the Card Order Status report.

Table 53. CARD_ORDER_STATUS

Field Name	Format	Description
CARD_TYPE_DESC	String	The description of the type of card.
CARD_TYPE_ID	String	The unique identifier for the type of card.
FULFILL_PARTY_DESC	String	The name of the party that completes the order.
FULFILLED_BY	String	The username of the fulfilling party.
FULFILLING_PARTY_ID	Number	The unique identifier of the party that completes the order.
ORDER_ACCEPTANCE_DATE	DateTime	The date the order was accepted by the ordering party.
ORDER_DATE	DateTime	The date the order was placed by the ordering party.
ORDER_NUMBER	Number	Unique identifier for each card order.
ORDER_PARTY_DESC	String	The name of the party that initiates the order.
ORDER_STATUS_DATE	DateTime	The date that the status was set against the order.
ORDER_STATUS_DESC	String	The status of the order.
ORDER_STATUS_ID	Number	The unique identifier of the status of the order.
ORDERED_BY	String	The username of the ordering party.
ORDERING_PARTY_ID	Number	The unique identifier of the party that initiates the order.
QUANTITY	Number	The number of cards that were ordered.
SHIP_DATE	DateTime	The date the order was shipped by the fulfilling party.

A.5.3   CARD_REPLACE_RETURN

The following table identifies the fields available in the CARD_REPLACE_RETURN view, which is used to source the Card Replacements and Returns report.

Table 54. CARD_REPLACE_RETURN

Field Name	Format	Description
BLOCK_DATE	DateTime	The date/time associated with the block on the card.

A.6   System Maintenance

The following Business Views are associated with the System Maintenance reports.

A.6.1   DEVICE_CONNECTIONS

The following table identifies the fields available in the DEVICE_CONNECTIONS view, which is used to source the Device Connections report.

Table 55. DEVICE_CONNECTIONS

Field Name	Format	Description
APP_VERSION	String	The version of the Transit Application that is loaded on the device.
DAC_ID	String	The unique identifier of the DAC that the device connected to.
DEVICE_ID	String	The unique value assigned to the device in which the fault occurred (same as Serial Number).
DEVICE_STATUS_DESC	String	The description of the device status (e.g., In Service).
DEVICE_STATUS_ID	Number	The unique identifier of the device status.
DEVICE_TYPE_ID	String	The unique identifier of the type of device in which data is being gathered.
DISTRIBUTION_ID	Number	The unique identifier of the current CD statistics. This is the "current" version of the Configuration Data loaded on the device.
FUTURE_CDDISTRIBUTION_CD_USED	Number	ERG Internal CD tracking valueThis is the "Future" version of the Configuration data loaded on the device.
LAST_CONN_DATE	DateTime	The most recent date/time the device connected to the DAC.
LOCATION	String	The install location of the Device.
MAX_DISTRIBUTION_ID	Number	"Deployed CD Version" this is the CD Version that is currently deployed.
SERIAL_NUMBER	String	The unique value assigned to the device in which the fault occurred.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.

A.6.2   DEVICE_FAULTS

The following table identifies the fields available in the DEVICE_FAULTS view, which is used to source the Device Faults report.

Table 56. DEVICE_FAULTS

Field Name	Format	Description
ACTUAL_FAULT	String	The description of the actual fault after diagnosis by the ESB Maintenance Center.
AGENCY_WO	String	The corresponding Work Order Number as reported by the Agency to the ESB.
ASSET_PARTICIPANT_ID	Number	The unique identifier of the asset participant associated with the device.
ASSET_PARTICIPANT_NAME	String	The name of the asset participant associated with the device.
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
FAULT_DATE	DateTime	The date/time that the device fault occurred.
FAULT_RESOLUTION	String	The description of the action performed by the ESB Maintenance Center.
LOCATION	String	The install location of the Device.
NOTIFICATION_DATE	DateTime	The date/time that the ESB was notified of the Device Fault.
OCCURRENCE_NUMBER	String	The Occurrence Number (if applicable) associated with the fault. (Either RMA or Occurrence Number used - determines where the fault is in the Repair Lifecycle)
REPORTED_FAULT	String	The description of the type of fault as identified by the Agency to the ESB.
RESOLUTION_DATE	DateTime	The date and time the device fault was resolved.
RMA_NUMBER	String	The Return Materials Authorization number (if applicable) associated with the fault. (Either RMA or Occurrence Number used - determines where the fault is in the Repair Lifecycle)
SERIAL_NUMBER	String	The unique value assigned to the device in which the fault occurred.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
SWAP_DEVICE_SERIAL_NO	String	If applicable, this is the serial number of the replacement device used to resolve the fault.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.

A.6.3　DEVICE_INCONSISTENCIES

The following table identifies the fields available in the DEVICE_INCONSISTENCIES view, which is used to source the Device Audit Register Inconsistencies report.

Table 57. DEVICE_INCONSISTENCIES

Field Name	Format	Description
AR_COUNT	Number	The count of Accounts Receivable transactions associated with the transaction date.
AR_VALUE	Number	The amount (in cents) associated with the transactions on the transaction date (not actual revenue).
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
SERIAL_NUMBER	String	The unique value assigned to the specific device.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
TXN_DATE	DateTime	The date of the transactions.
TXN_DESC	String	The description of the type of transaction in which the discrepancy is associated.
UD_COUNT	Number	The count of UD transactions associated with the transaction date.
UD_VALUE	Number	The amount (in cents) associated with the uploaded UD transaction on the transaction date (not actual revenue).

A.6.4　DEVICE_INVENTORY

The following table identifies the fields available in the DEVICE_INVENTORY view, which is used to source the Device Inventory report.

Table 58. DEVICE_INVENTORY

Field Name	Format	Description
ACCEPT_DATE	DateTime	The date and time that the device was put into original operation.
ASSET_PARTICIPANT_ID	Number	The unique identifier of the asset participant associated with the device.
ASSET_PARTICIPANT_NAME	String	The name of the asset participant associated with the device.
DEVICE_STATUS_DESC	String	The description of the device status (e.g., In Service).
DEVICE_STATUS_ID	Number	The unique identifier of the device status.
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
LOCATION	String	The install location of the Device.

Field Name	Format	Description
SERIAL_NUMBER	String	The unique value assigned to the specific device.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
STATUS_BY	String	The identifier of the user that last updated the device status.
STATUS_DATE	DateTime	The date and time which the availability data is obtained.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.

A.6.5   DEVICE_WARRANTY

The following table identifies the fields available in the DEVICE_WARRANTY view, which is used to source the Device Warranty report.

Table 59. DEVICE_WARRANTY

Field Name	Format	Description
ACCEPT_DATE	DateTime	The date and time the device was put into original operation.
ASSET_PARTICIPANT_ID	Number	The unique identifier of the asset participant associated with the device.
ASSET_PARTICIPANT_NAME	String	The name of the asset participant associated with the device.
DEVICE_ID	String	The unique value (serial number) assigned to the device in which the warranty is being tracked.
DEVICE_STATUS_DESC	String	The current state of the device.
DEVICE_STATUS_ID	Number	The unique identifier of the current state of the device.
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
EXPIRY_DATE	DateTime	The first date and time the device is no longer covered by warranty.
INSTALL_LOCATION	String	The location the device is installed.
SHIP_TO_LOCATION	String	The location the device was shipped to.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
STATUS_BY_	String	The identifier of the user that last updated the device status.
STATUS_DATE	DateTime	The date that the Device Status was last updated.

A.6.6 ESB_ACTIVITY

The following table identifies the fields available in the ESB_ACTIVITY view, which is used to source the ESB Activity report.

Table 60. ESB_ACTIVITY

Field Name	Format	Description
ASSET_PARTICIPANT_ID	Number	The unique identifier of the asset participant associated with the device.
ASSET_PARTICIPANT_NAME	String	The name of the asset participant associated with the device.
CALL_NUMBER	String	The unique number given to the incident after being entered into the Metrix system
DEVICE_ID	String	The unique value assigned to the device in which the warranty is being tracked (same as Serial Number).
DEVICE_TYPE_ID	String	The description of the type of device in which data is being gathered.
LINE_STATUS	String	Return Materials Authorization Line Number Status.
RMA_DATE	DateTime	Date the RMA was obtained.
RMA_LINE	Number	Return Materials Authorization Line Number.
RMA_NO	String	Return Materials Authorization Number associated with the Device.
SERIAL_NUMBER	String	The unique value assigned to the device in which the warranty is being tracked.
SHIP_TO_LOCATION	String	The location of where the device was originally shipped.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
STATUS_BY	String	The identifier of the user that last updated the device status.
STATUS_DATE	DateTime	The date and time the device status was most recently updated.

A.6.7 ORCA_FRT

The following tables identify the fields available in the ORCA_FRT_REPORT_RESOLUTION, ORCA_FRT_REPORT_NOTES, and ORCA_FRT_REPORT_CALL views, which is used to source the ORCA FRT report.

Table 61: ORCA_FRT_REPORT_CALL

Field Name	Format	Description
CALL_DATE	DateTime	The date the call was logged by an ESB representative.

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Field Name	Format	Description
CALL_DESCRIPTION	Memo	A detailed description of the issue.
CALL_ID	String	The unique identifier for the call.
CALL_LAST_UPDATED_DT	DateTime	The date the call was most recently updated for any reason
CALL_LAST_UPDATED_TM	DateTime	The time the call was most recently updated for any reason
CALL_PRIORITY	String	The priority associated with the call (1,2,3). Default priority is 2 unless otherwise indicated by person reporting the issue.
CALL_STATUS	String	The current status of the call (Open, Completed).
CHARGEABLE	String	Contains the value "Include" if chargeable. Any other value is considered non-chargeable.
CONTACT_EMAIL_ADDRESS	String	Email address of the person making the call or designated as the person to contact for questions/resolution/status.
CONTACT_FIRST_NAME	String	First name of the person making the call or designated as the person to contact for questions/resolution/status.
CONTACT_LAST_NAME	String	Last name of the person making the call or designated as the person to contact for questions/resolution/status.
CONTACT_PHONE	String	Phone number of the person making the call or designated as the person to contact for questions/resolution/status.
DEVICE	String	The device associated with the issue (if applicable).
DEVICE_MODEL	String	The device model associated with the issue (if applicable).
DEVICE_PLACE_NAME	String	The location of the device associated with the issue (if applicable).
DEVICE_SERIAL	String	The unique serial number of the device associated with the call (if applicable).
PLACE_GROUP	String	The project in which the device pertains (RFCS).
SUBMITTING_AGENCY	String	The agency that is associated with submitting the call.
TASK_ASSIGNEE	String	The ESB person currently assigned to investigate/resolve a call task.
TASK_ID	Number	The unique task number associated with a call (a call can have multiple tasks).
TASK_LAST_UPDATED_DTTM	DateTime	The date and time the task was most recently updated for any reason.
TASK_PRIORITY	String	The priority (1,2,3) of a call task. Default priority is 2 (standard).
TASK_STATUS	String	The status of the task (Assigned, Updated, Awaiting Customer, Hold, etc.).

Table 62: ORCA_FRT_REPORT_NOTES

Field Name	Format	Description
NOTE	Memo	The note as entered by the ESB representative.
NOTE_DATE_TIME	DateTime	The date and time of the note entry.
NOTE_TYPE	String	The type of note being captured. View contains "EXT" values only (external).
TASK_ID	Number	The unique task ID in which the note applies.

Table 63: ORCA_FRT_REPORT_RESOLUTION

Field Name	Format	Description
CALL_ID	String	The call ID for which the task and resolution applies (a call can have multiple resolutions).
DURATION_MINUTES	Number	The duration from task start to task end that the task was open.
RESOLUTION_DATE_TIME	DateTime	The date and time the call was closed and the resolution was applied.
RESOLUTION_TEXT	Memo	The detailed description of the call resolution.
TASK_END	DateTime	The end date and time associated with the task resolution.
TASK_ID	Number	The unique task id in which the resolution applies.
TASK_START	DateTime	The start date and time associated with the task resolution.
TASK_STATUS	String	The current status of the task (Open, Complete, Awaiting Customer)

A.7 Mail Center

The following Business Views are associated with the Mail Center reports.

A.7.1 CIPP_ORDER_DETAILS

The following table identifies the fields available in the CIPP_ORDER_DETAILS view, which is used to source the CIPP Order Details report.

Table 64. CIPP_ORDER_DETAILS

Field Name	Format	Description
CARD_COUNT	Number	The number of cards within the card order
CIPP_ORDER_NO	Number	The specific tracking number associated with the CIPP card order
CSN_LIST	String	The card serial number(s) associated with the card(s) being ordered
CUSTOMER_NAME	String	The name of the customer requesting the card
DATE_COMPLETED	DateTime	The date the CIPP card order was completed
ORDER_DATE	DateTime	The date the CIPP card order was created

Field Name	Format	Description
CARD_COUNT	Number	The number of cards within the card order
PART_NUMBER	Number	The part number associated with the CIPP card order (if applicable)
PRINTER_NAME	String	The name of the printer in which the cards were successfully assigned
PRODUCTS	String	The description of the product(s) being loaded on the card(s)
USERNAME	String	The username associated with assigned the card order to a printer
Field Name	Format	Description
CIPP_ORDER_NO	Number	The specific tracking number associated with the CIPP card order
CSN	Number	The card serial number associated with the card being ordered
CUSTOMER_NAME	String	The name of the customer requesting the card
DATE_COMPLETED	DateTime	The date the CIPP card order was completed
ORDER_DATE	DateTime	The date the CIPP card order was created
PRINTER_NAME	String	The name of the printer in which the cards were successfully assigned
PRODUCT_DESC	String	The description of the product being loaded on the card
USERNAME	String	The username associated with assigned the card order to a printer

A.7.2   CIPP_ORDER_RESTART

The following table identifies the fields available in the CIPP_ORDER_RESTART view, which is used to source the CIPP Order Restart report.

Table 65. CIPP_ORDER_RESTART

Field Name	Format	Description
CARD_COUNT	Number	The number of cards within the card order
CIPP_ORDER_NUMBER	Number	The specific tracking number associated with the CIPP card order.
CSN_LIST~~CSN~~	String~~Number~~	The card serial number of the overridden card.~~The card serial number of the overridden card.~~
DATE_PROCESSED	DateTime	The date the CIPP card order was processed and cancelled/paused.
PRINTER ERROR	String	If a card is restarted due to a printer error, this field will display the error message associated with the print failure.
SOURCE_ORDER	String	The source in which the order was placed (e.g., BA Website, Cardholder Website, Call Center Website, etc.).

Field Name	Format	Description
SOURCE_ORDER_NUMBER	Number	The tracking number within the source associated with an individual component of a card order.
SOURCE_ORDER_OWNER	String	The name of the person placing the individual component of a card order.
USERNAME	String	The username associated with assigning the card order.

A.7.3   CIPP_PRINTER_ACTIVITY

The following table identifies the fields available in the CIPP_PRINTER_ACTIVITY view, which is used to source the CIPP Printer Activity report.

Table 66. CIPP_PRINTER_ACTIVITY

Field Name	Format	Description
CARD_COUNT~~PRINT_DATE~~	Number~~DateTime~~	The number of cards associated with the order number that were successfully printed.~~The date the CIPP card order successfully printed~~
CIPP_ORDER_NUMBER~~PRINTER_NAME~~	Number~~String~~	The Order Number associated with the cards being printed.~~The printer used to print the card order~~
PRINT_DATE~~USERNAME~~	DateTime~~String~~	The date the CIPP card order successfully printed.~~The username associated with closing the card order~~
PRINTER_NAME~~CIPP_ORDER_NUMBER~~	String~~Number~~	The printer used to print the card order.~~The Order Number associated with the cards being printed~~
USERNAME~~CARD_COUNT~~	String~~Number~~	The username associated with closing the card order.~~The number of cards associated with the order number that were successfully printed~~

A.8   National Transit Database (NTD)

The following Business Views are associated with the National Transit Database reports.

A.8.1   NTD

The following table identifies the fields available in the NTD view, which is used to source the following reports:

- Average Weekday, Saturday, and Sunday Unlinked Trip Totals
- Annual Unlinked Trip Totals
- Unlinked Trips by Mode
- Total Passenger Fares
- Fares by Fare Category
- Fares by Mode

Table 67. NTD

Field Name	Format	Description

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Field Name	Format	Description
FARE_CATEGORY_DESC	String	The description of the fare category (passenger type) associated with the unlinked trip fare.
FARE_CATEGORY_ID	Number	The unique identifier of the fare category (passenger type) associated with the unlinked trip fare.
MODE_DESC	String	The mode of service (e.g., Bus, Ferryboat, Commuter Train, etc.).
NUMBER_OF_PASSENGERS	Number	The number of passengers associated with the boarding.
ORIGINAL_PARENT_ROUTE_ID	String	High-level identifier of a route (considered "Route ID" for reporting).
SATURDAY	Number	1 if the transaction took place on a Saturday. 0 if false.
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
SUNDAY	Number	1 if the transaction took place on a Sunday. 0 if false.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TRIP_ORIGINAL_ID	String	Combination of route direction and departure time makes up the "Trip ID" for reporting.
TRIP_START	Number	Minutes after midnight that indicate the start time of the associated trip.
TRUE_FARE	Number	Revenue earned by transaction through purse/pass contribution received by service participant (converted to dollars).
TXN_DATE	DateTime	The business date of the unlinked trip.
TYPE_OF_SERVICE	String	Describes whether or not the service was directly operated (DO) or purchased (PT).
WEEKDAY	Number	1 if the transaction took place on a Weekday. 0 if false.

A.9   Common Ridership and Revenue

The following Business Views are associated with the Common Ridership and Revenue reports.

A.9.1   FARE_CARD_USAGE

The following table identifies the fields available in the FARE_CARD_USAGE view, which is used to source the Fare Card Usage report.

Table 68. FARE_CARD_USAGE

Field Name	Format	Description
CARD_SALE	Number	Populated with a 1 if the transaction is the SALE of a product on a card. 0 if false.
CARD_USAGE	Number	Populated with a 1 if the transaction is the USE of a product on a card. 0 if false.
CSN	Number	The serial number of the card.
PRODUCT_DESC	String	The description of the product associated with the transaction.
PRODUCT_ISSUER_ID	Number	The ID of the Agency that issues the product that was sold.
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TXN_AMOUNT	Number	When transaction is a sale, the amount is the actual $$ spent on obtaining the card. When the transaction is a usage, the amount is the apportioned value earned by the Service Participant (in cents).
TXN_DATE	DateTime	The calendar ~~date~~ month of the transaction.

A.9.2 NON_FARE_CARD_ACTIVITY

The following table identifies the fields available in the NON_FARE_CARD_ACTIVITY view, which is used to source the Non Fare Card Activity by Route report.

Table 69. NON_FARE_CARD_ACTIVITY

Field Name	Format	Description
COUNTER_ID	Number	The identifier of the button pressed for the boarding - associated with the DDU button as defined for each agency (e.g., adult full fare, senior/disabled, wheelchair, etc).
~~MODE ID~~	~~Number~~	~~The unique identifier associated with the type of transportation used in association with the transaction.~~
MODE_DESCRIPTION	String	The description of the type of transportation used in association with the transaction.
~~OPERATOR_ID~~	~~String~~	~~The id of the operator of the DDU capturing the boarding.~~
ORIGINAL_PARENT_ROUTE_ID	String	The identifier that translates to the "Route ID" of the transaction.

Field Name	Format	Description
RIDERSHIP	Number	Identifies if the DDU button pressed is associated with a "Ridership" (1) or "Non-Ridership" (0) counter.
ROUTE_DIRECTION	String	The direction of the route (e.g., Northbound).
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TRIP_ORIGINAL_ID	String	The identifier that translates to the "Trip ID" of the transaction.
TRIP_START	Number	The minutes after midnight that designate the start time of a trip.
TXN_DATE	DateTime	The physical date the boarding took place. Note - this may be different than the business date associated with the boarding as some trips start after midnight and are applicable to the prior day's business date. The Non Farecard Activity report uses the Trip_Start in conjunction with the Txn_Date to determine the actual business date that the boarding should be associated.~~The business date the boarding took place.~~
VALUE	Number	For all counters, value is set to 1 (1 button press equals 1 boarding), except for Passenger Headcount. With Passenger Headcount, this is the actual value entered into the DDU.

A.9.3   ORCA_ACTIVITY

The following table identifies the fields available in the ORCA_ACTIVITY view, which is used to source the ORCA Activity report.

Table 70. ORCA_ACTIVITY

Field Name	Format	Description
BOARDING_TYPE_ID	Number	The type of Boarding taking place within the transaction. 0 = Non-Fare Card, 1 = Single Leg, 2 = Single-Agency Multi-Leg, 3 = Multi-Agency, Multi-Leg.
DAY_TYPE	String	Indicates SAT, SUN, WEEK, or HOLIDAY based on the day the service took place.
LINKED_TRIP_ID	Number	Unique identifier for each linked trip.
~~MODE ID~~	~~Number~~	~~The unique identifier associated with the type of transportation used in association with the transaction.~~

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Field Name	Format	Description
MODE_DESCRIPTION	String	The description of the type of transportation used in association with the transaction.
NUMBER_OF_PASSENGERS	Number	The number of passengers associated with the boarding of the linked trip.
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	The name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	The name of the commissioned owner of the device on which UD transactions are generated.
TRANSIT_OPERATOR	String	The operator of the transit vehicle.
TXN_DATE	DateTime	The business date to which the boarding transaction is applicable.The business date of the boarding.

A.9.4　ORCA_BOARDINGS

The following table identifies the fields available in the ORCA_BOARDINGS view, which is used to source the following reports:

- ORCA Boardings by Route
- ORCA Boardings by Fare an Passenger Type
- ORCA Boardings by Product Type

Table 71. ORCA_BOARDINGS

Field Name	Format	Description
APPORTIONED_VALUE	Number	The apportioned value of the transaction (in cents).
CEFFV	Number	The cash equivalent full-fare value of the transaction (in cents).
CSN	Number	The unique Card Serial Number associated with the transaction.
MODE_ID	Number	The unique identifier associated with the type of transportation used in association with the transaction.
MODE_DESCRIPTION_FROM	Number	The unique identifier associated with the type of transportation used in association with the prior boarding transaction.
MODE_DESCRIPTION_TO	String	The description of the type of transportation used in association with the current boarding transaction.
NUMBER_OF_PASSENGERS	Number	The number of passengers associated with the boarding.

Field Name	Format	Description
PASSENGER_TYPE_DESC	String	The description of the passenger type of the product/card associated with the boarding transaction.
PASSENGER_TYPE_ID	Number	The unique ID associated with the passenger type of the product/card associated with the boarding transaction.
PRODUCT_DESC	String	The product associated with the boarding transaction.
PRODUCT_ID	Number	The ID of the type of product used.
PRODUCT_ISSUER_ID	Number	The ID of the Agency that issues the product that was used.
ROUTE_DIRECTION_FROM	String	The route direction associated with the route of the prior transaction - either inbound or outbound.
ROUTE_DIRECTION_TO	String	The route direction associated with the route of the current transaction - either inbound or outbound.
ROUTE_ID_FROM	String	The Route ID associated with the previous boarding transaction.
ROUTE_ID_TO	String	The Route ID associated with the current boarding transaction.
ROUTE_VARIANT_FROM	Number	The Route Variant associated with the previous boarding transaction.
ROUTE_VARIANT_TO	Number	The Route Variant associated with the current boarding transaction.
SERVICE_PART_ID_FROM	Number	The unique identifier of the operator from the prior transaction.
SERVICE_PART_ID_TO	Number	The unique identifier of the operator on whose behalf the current UD transaction is generated.
SERVICE_PART_NAME_FROM	String	The name of the operator from the prior transaction.
SERVICE_PART_NAME_TO	String	The name of the operator on whose behalf the current UD transaction is generated.
SOURCE_PART_ID_FROM	Number	The unique identifier of the commissioned owner of the device on which the prior UD transaction was generated.
SOURCE_PART_ID_TO	Number	The unique identifier of the commissioned owner of the device on which the current UD transaction is generated.
SOURCE_PART_NAME_FROM	String	The name of the commissioned owner of the device on which the prior UD transaction was generated.
SOURCE_PART_NAME_TO	String	The name of the commissioned owner of the device on which the current UD transaction is generated.
TRANSIT_OP_FROM	String	The operator of the transit vehicle from the prior transaction.

Field Name	Format	Description
TRANSIT_OP_TO	String	The operator of the transit vehicle from the current transaction.
TRIP_ID	String	The identifier of the trip associated with the current route and boarding.
TRIP_START	Number	Minutes after midnight in which identifies the start time of the departure time of the trip.
TWIN_PAIR_STATE	Number	Identifies if the boarding was paid with two different products (e.g., purse and pass).
TXN_DATE	DateTime	The business date to which the boarding transaction is applicable.The date associated with the boarding transaction.

A.9.5   ORCA_TRANSFER

The following table identifies the fields available in the ORCA_TRANSFER view, which is used to source the ORCA Transfer Matrix report.

Table 72. ORCA_TRANSFER

Field Name	Format	Description
APPORTIONED_VALUE	Number	The apportioned value of the transaction (in cents).
BOARDINGCOUNT	Number	The number of passengers associated with the boarding.
CEFFV	Number	The cash equivalent full-fare value of the transaction (in cents).
CSN	Number	The unique Card Serial Number associated with the transaction.
FROM_ROUTE_ID	String	The Route ID associated with the previous boarding transaction.
FROM_SERV_PART_NAME	String	The name of the operator from the prior transaction.
FROM_SERVICE_PART_ID	Number	The unique identifier of the operator from the prior transaction.
FROM_SOUR_PART_NAME	String	The name of the commissioned owner of the device on which the prior UD transaction was generated.
FROM_SOURCE_PART_ID	Number	The unique identifier of the commissioned owner of the device on which the prior UD transaction was generated.
FROM_TRANSIT_OP	String	The operator of the transit vehicle from the prior transaction.
MODE_DESCRIPTION_FROMMODE ID	StringNumber	The description of the type of transportation used in association with the prior boarding.The unique identifier associated with the type of transportation used in association with the transaction.

Field Name	Format	Description
MODE_DESCRIPTION_TO~~MOD E_DESC~~	String~~String~~	The description of the type of transportation used in association with the current boarding.~~The description of the type of transportation used in association with the transaction.~~
NUMBER_OF_PASSENGERS	Number	The number of passengers associated with the boarding.
PASSENGER_TYPE_DESC	String	The description of the passenger type of the product/card associated with the boarding transaction.
PRODUCT_DESC	String	The product associated with the boarding transaction.
TO_ROUTE_ID	String	The Route ID associated with the current boarding transaction.
TO_SERVICE_PART_ID	Number	The unique identifier of the operator on whose behalf the current UD transaction is generated.
TO_SERVICE_PART_NAME	String	The name of the operator on whose behalf the current UD transaction is generated.
TO_SOURCE_PART_ID	Number	The unique identifier of the commissioned owner of the device on which the current UD transaction is generated.
TO_SOURCE_PART_NAME	String	The name of the commissioned owner of the device on which the current UD transaction is generated.
TO_TRANSIT_OP	String	The operator of the transit vehicle from the current transaction.
TWIN_PAIR_STATE	Number	Identifies if the boarding was paid with two different products (e.g., purse and pass).
TXN_DATE	DateTime	The business date to which the boarding transaction is applicable.~~The date associated with the boarding transaction.~~

A.9.6   VANPOOL_SUBSIDY

The following table identifies the fields available in the VANPOOL_SUBSIDY view, which is used to source the Vanpool Subsidy Status report.

Table 73: VANPOOL_SUBSIDY

Field_Name	Format	Description
AGENCY_ID	Number	The unique identifier of the agency that owns the vanpool for which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
AGENCY_NAME	String	The name of the agency that owns the vanpool for which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
CH_CONTRIBUTION	Number	The fare contributed by the cardholder for the vanpool usage.

Field_Name	Format	Description
CSN	Number	The unique Card Serial Number associated with the vanpool transaction.
INST_CONTRIBUTION	Number	The fare contributed by an institution for the vanpool usage - based on the institutional agreement (will not be more than the cost of the pass). (This field is populated only when transaction associated with an Institution.)
INSTITUTION_ID	Number	The unique identifier of the institution associated with the vanpool transaction. Only applies if the transaction is associated with an Institution.
PRODUCT_DESC	String	The description of the product that was not redeemed.
TXN_DATE	DateTime	The date/time (mm/dd/yyyy hh:mm:ss) of the vanpool pass purchase transaction.
VANPOOL_DESC	String	The description of the agency vanpool.
VANPOOL_ID	Number	The unique identifier of the agency vanpool.

See A.4.9 for the fields available in the VANPOOL_SUBSIDY view used to source the Vanpool Subsidy Status report.

A.9.7   VANPOOL_USAGE

The following table identifies the fields available in the VANPOOL_USAGE view, which is used to source the Vanpool Usage report.

Table 74: VANPOOL_USAGE

Field Name	Format	Description
AGENCY_ID	Number	The unique identifier of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
AGENCY_NAME	String	The name of the agency that owns the vanpool in which the transaction is associated. Only applies if the transaction is NOT associated with an Institution.
CSN	Number	The unique Card Serial Number associated with the vanpool transaction.
PRODUCT_DESC	String	The description of the product that was not redeemed.
TXN_AMOUNT	Number	The amount of the vanpool transaction.
TXN_DATE	DateTime	The date/time (mm/dd/yyyy hh:mm:ss) of the vanpool usage transaction.
VANPOOL_ID	Number	The unique identifier of the agency vanpool.

A.9.8   CONSOLIDATED_RS

The following table identifies the fields available in the CONSOLIDATED_RS view, which is used to source the Consolidated Farecard/Non-Farecard ridership by Route/Run report and Matrix report.

Table 75: CONSOLIDATED_RS

Field Name	Format	Description
NUMBER_OF_PASSENGERS	Number	This is the "value" from the Non-Farecard counter, or the number of passengers from Farecard boarding.
ORIGINAL_PARENT_ROUTE_ID	String	The route ID associated with the route.
ROUTE_DIRECTION	String	The direction (Inbound, Outbound) of the route
RUN_ID	Number	The run ID associated with the route.
SERVICE_PARTICIPANT_ID	Number	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	String	Name of the operator on whose behalf the UD transaction is generated.
SOURCE_PARTICIPANT_ID	Number	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	String	Name of the commissioned owner of the device on which UD transactions are generated.
TRIP_ORIGINAL_ID	String	The identifier that translates to the "Trip ID" of the transaction for reporting purposes.
TRIP_START	Number	The minutes after midnight that designate the start time of a trip.
TXN_DATE	DateTime	The business date to which the boarding transaction is applicable.
VEHICLE_ID	Sting	The unique identifier of the vehicle in which the boarding transaction took place.

See A.4.10 for the fields available in the VANPOOL_USAGE view used to source the Vanpool Usage report.

Appendix B Ad Hoc Business Views

The following Business Views were created specifically for ad hoc reporting needs. All data is available for a period of ninety (90) days for reporting purposes.

The following formats are associated with business view data:

- Number – this format can contain both integer and decimal values. Normally dollars are represented in "pennies" and therefore no decimal is necessary.

- DateTime – this format applies to any date value. A "time" is not always applicable based on how the data is captured and/or presented. For instance, a view of summary data will more than likely have a date only – and the time will default to 0 (which equates to midnight). The description of the field will identify if the "time" portion is applicable.

- String – this format can contain any alphanumeric content, including special symbols and characters.

B.1   Journey Data

This section describes the database business views associated with passenger journeys.

B.1.1   AV_BILLABLE_LINKED_TRIP

This view is for detail regarding Billable Linked Trips. Table 144 describes the Billable Linked Trip data elements.

Table 76: Billable Linked Trip Data

Name	Format	Description
BILLABLE_LINKED_TRIP_ID	NUMBER	Unique identifier for each billable linked trip (which is composed of separate unlinked trips)
BRANCH	STRING	The description of the branch of the institution for this agreement.
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction

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Name	Format	Description
EARNED_REVENUE	NUMBER	Revenue apportioned to this unlinked trip within the BLT for that product and period
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred
MODE_ID	NUMBER	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESCRIPTION	STRING	The description of the type of transportation used in association with the transaction
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.

Name	Format	Description
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

B.1.2   AV_LINKED_TRIP

This view is for detail regarding Linked Trips. Table 145 describes the Linked Trip data elements.

Table 77: Linked Trip Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.

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Name	Format	Description
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LINKED_TRIP_ID	NUMBER	Unique identifier for each linked trip (which is composed of separate unlinked trips)
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred
MODE_ID	NUMBER	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESCRIPTION	STRING	The description of the type of transportation used in association with the transaction
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

B.2   Transaction Data

This section describes the database business views associated with specific transaction categories.

B.2.1   AV_AGENCY_CLAIMS

This view is for the status of financial claims made by Agencies submitted to the CCH. Table 146 describes the Agency claim data elements.

Table 78: Agency Claim Data

Name	Format	Description
APPROVAL_DATE	DATETIME	The date the claim was successful and the status updated by the Fiscal Agent.
APPROVED_AMT	NUMBER	Amount of the initial claim that has been approved.
CLAIM_AMT	NUMBER	Amount initially claimed
CLAIM_DATE	DATETIME	The date the claim was entered into the system by the Fiscal Agent.
CLAIM_ID	STRING	Unique claim identifier
CLAIM_STATUS_DESC	STRING	The description of the current claim status
CLAIM_STATUS_ID	STRING	Unique identifier for claim status.
COUNTERPARTY_ID	NUMBER	The ID of the counterparty to the transaction. This is the participant that will receive an equal and opposite adjustment to their Settlement Account.
COUNTERPARTY_NAME	STRING	Name of the counterparty
PARTICIPANT_ID	NUMBER	ID of Participant that is lodging the claim.
PARTICIPANT_NAME	STRING	Name of the participant

B.2.2   AV_AUTOLOAD_CC_DETAIL

This view is for capturing credit card information used for Autoload transactions. Table 79 describes the Autoload Credit Card Detail data elements.

Table 79: Autoload Credit Card Detail

Name	Format	Description
CARDHOLDER_ADDRESS1	STRING	The first line address of the person registered to the card.
CARDHOLDER_ADDRESS2	STRING	The second line address of the person registered to the card (if applicable).
CARDHOLDER_CITY	STRING	The city of the person registered to the card.
CARDHOLDER_EMAIL	STRING	The email address of the person registered to the card.
CARDHOLDER_FIRSTNAME	STRING	The first name of the person registered to the card.
CARDHOLDER_ID	NUMBER	The unique identifier of the cardholder associated with the card to be Autoloaded.

Name	Format	Description
CARDHOLDER_LASTNAME	STRING	The last name of the person registered to the card.
CARDHOLDER_PHONE	STRING	The phone number of the person registered to the card.
CARDHOLDER_STATE	STRING	The state abbreviation of the person registered to the card.
CARDHOLDER_ZIP	STRING	The zip code of the person registered to the card.
CC_CARD_NUMBER	STRING	The last 4-digits of the credit card number.
CC_CARD_TYPE	STRING	Visa or MasterCard
CC_EXPIRATION_DATE	DATETIME	The date of expiration listed on the credit card.
CSN	NUMBER	Card Serial Number associated with the card to be Autoloaded.

B.2.3　AV_AUTOLOAD_REQUESTS

This view is for capturing credit card information used for Autoload requests. The following describes the Autoload Requests data elements.

Table 80: Autoload Requests

Name	Format	Description
AMOUNT	NUMBER	The amount, in cents, of the autoload request.
CSN	NUMBER	The card number that the autoload effects.
PRODUCT_DESC	STRING	The description of the product associated with the autoload being requested.
REQUEST_DATE	DATETIME	The date and time the transfer request was first sent to the bank.
TRANSACTION_CODE	NUMBER	The unique code from CyberSource to reference the transaction.
TXN_DATE	DATETIME	The date and time the transaction is effected to the associated card.

B.2.4　AV_CARD_REFUNDS_AD_HOC

This view is for transactions associated with a card refund.

Table 147 describes the card refund data elements.

Table 81: Card Refunds Ad Hoc Data

Name	Format	Description
CARD_STATUS	STRING	The description of the current status of the card (should be BLOCKED).
CARDHOLDER_ADDRESS1	STRING	First line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER_ADDRESS2	STRING	Second line of the cardholder's address. Will be BLANK if an anonymous card.

Name	Format	Description
CARDHOLDER_CITY	STRING	Cardholder City. Will be BLANK if an anonymous card.
CARDHOLDER_FIRST_NAME	STRING	The first name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_ID	NUMBER	The unique Identifier for a cardholder.
CARDHOLDER_LAST_NAME	STRING	The last name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_STATE	STRING	Cardholder State. Will be BLANK if an anonymous card.
CARDHOLDER_ZIP	STRING	Cardholder ZIP. Will be BLANK if an anonymous card.
CSN	NUMBER	The card serial number of the card the refund was processed against.
DEVICE_ID	NUMBER	The identifier of the CST that initiated the refund transaction.
PARTICIPANT_ID	NUMBER	Unique identifier to the party responsible for initiating the refund transaction.
PARTICIPANT_NAME	STRING	The party responsible for initiating the refund transaction. This will be an Agency name OR the Mail Center.
RECEIPT_NUMBER	NUMBER	Number associated with the transaction generated from CST or website.
REFUND_DATE	DATETIME	The date the refund transaction was created and sent to the Clearinghouse for processing.
REFUND_FEE	NUMBER	Amount of refund fee charged.
REFUND_REASON	STRING	The reason associated with the card (should be REFUND).
REFUNDED_PURSE_VALUE	NUMBER	The value that was remaining on the PURSE at the time of the refund.
TRANSFER_DATE	DATETIME	Date funds transferred from float account to agency account.
USER_ID	STRING	User name associated with login - currently first initial + last name.

B.2.5   AV_CARD_TXFR_AND_RECEIPT

This view is for transactions associated with a card transfer and/or receipts.

Table 82 describes the Card Txfr And Receipts data elements.

Table 82: Card Txfr and Receipts Data

Name	Format	Description
ASSET_PARTICIPANT_ID	NUMBER	The unique ID of the Asset Participant

Name	Format	Description
ASSET_PARTICIPANT_NAME	STRING	The descriptive name of the Asset Participant who owns the card
CARD_ORDER_NUMBER	NUMBER	The unique card order number associated with the card transfer
CARD_TYPE_DESC	STRING	The description of the type of card
CARD_TYPE_ID	NUMBER	The unique ID of the type of card
CSN	NUMBER	The card serial number associated with an accepted, shipped, or rejected card order
FULFILLING_PARTY_ID	NUMBER	The unique ID that identifies the Fulfilling Party of the transfer
FULFILLING_PARTY_NAME	STRING	The descriptive name of the Fulfilling Party
LOCATION	STRING	The physical location of the card
ORDER_ACCEPTANCE_DATE	DATETIME	The date the order was accepted
ORDER_STATUS_DATE	DATETIME	The most recent date the order status was updated
ORDER_STATUS_DESC	STRING	The actual status of the order
ORDER_STATUS_ID	NUMBER	The unique ID identifying the status of an order
ORDERING_PARTY_ID	NUMBER	The unique ID that identifies the Ordering Party of the transfer
ORDERING_PARTY_NAME	STRING	The descriptive name of the Ordering Party
UPDATED_BY	STRING	The user who most recently updated the order – as is viewed on the Agency Website, Card Order & Inventory management Card order details
UPDATED_DATE	DATETIME	The date of the most recent order update
WORK_ORDER_NUMBER	NUMBER	The work order number associated with the card transfer
WORK_ORDER_TYPE	STRING	The type of work order associated with the card transfer

B.2.6   AV_FARE_PAYMENT_TRANSACTIONS

This view is for transactions that record the use of a product on a card for the purposes of paying to take a trip. This includes single payment and entry/exit tagging.

Table 148 describes the fare payment transaction data elements.

Table 83: Fare Payment Transaction Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.

Name	Format	Description
BRANCH	STRING	The description of the branch of the institution for this agreement.
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	NUMBER	The unique ID of the type of the card associated with the transaction.
CASH_FARE_PAYABLE	NUMBER	The portion of the fare payable for the trip that was due to be paid in cash, as a result of insufficient funds in the purse to pay the fare (also known as the upgrade fare).
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CEFFV	NUMBER	Cash Equivalent Full Fare Value. The full fare the cardholder would expect to pay for the service if paying in cash. During the Automated Fare Collection (AFC) process, the fare actually paid is calculated as this fare less any applicable transfer fare credits, purse discounts, etc.
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
CURR_LEG_FARE_CREDIT	NUMBER	Purse Use/Rebate on Exit Transactions Only: The amount (from the current leg of the passenger journey) that may contribute toward the total transfer fare credit for subsequent legs of the passenger journey.
DEST_PART_NAME	STRING	Name of the destination participant
DESTINATION_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DESTINATION_LOCATION	NUMBER	Identifies the tag-off location of a transaction/non fare card event
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOSTNAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address

Name	Format	Description
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The date and time the card was swiped for the transaction (may be different than Business Date)
MODE_ID	NUMBER	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESCRIPTION	STRING	The description of the type of transportation used in association with the transaction
MULTIRIDE_CONT_VALUE	NUMBER	Transactions involving a multi-ride only: The cash equivalent full fare value of the multi-ride contribution to the fare.
NUMBER_OF_PASSENGERS	NUMBER	The number of passengers associated with the fare payment transaction.
NUMBER_OF_ZONES	NUMBER	The number of zones to use for fare calculation. This is only populated for fare calculation and is provided in UD and business views for fare payment transactions only.
ORIGIN_LOCATION	NUMBER	Identifies the tag-on location of a transaction/non fare card event
PASS_CONT_VALUE	NUMBER	Transactions involving a pass only: The cash equivalent full fare value of the pass contribution to the fare.
PASSENGER_TYPE_DESC	STRING	The description of the passenger type
PASSENGER_TYPE_ID	NUMBER	The unique identifier of the passenger type that was used associated with charging the fare for the trip.

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Name	Format	Description
PASSENGER_VEHICLE_TYPE	NUMBER	The unique identifier of the passenger vehicle type (e.g., bicycle, motorcycle, etc.) for the transaction (WSF only). Set to zero if there is no vehicle.
PREV_LEG_LOCAL_DATE_TIME	DATETIME	The date/time of the leg immediately previous to this one that is part of the current passenger journey.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_CONT_VALUE	NUMBER	Transactions involving a purse only: The cash equivalent full fare value of the purse contribution to the fare.
PURSE_REMAINING_VALUE	NUMBER	The purse value after completion of this transaction, if this transaction involved a purse.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
RECREDIT_REASON_DESC	STRING	The description of the recredit reason.
RECREDIT_REASON_ID	NUMBER	The unique identifier for the reason for recrediting the purse.
REMAINING_RIDES	NUMBER	The number of rides remaining on the product after completion of this transaction, if this transaction involved a multi-ride.
ROUTE_DIRECTION	STRING	The direction of the route, either inbound or outbound.
ROUTE_DIRECTION_FROM	STRING	The route direction associated with the prior transaction (inbound or outbound)
ROUTE_ID	NUMBER	The route associated with the transaction/non fare card event.
ROUTE_ID_FROM	NUMBER	The route associated with the prior transaction.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device

Name	Format	Description
SERVICE_PART_ID_FROM	NUMBER	The unique identifier of the operator from which the transaction/non fare card event came from.
SERVICE_PART_ID_TO	NUMBER	The unique identifier of the operator on whose behalf the journey is associated.
SERVICE_PART_NAME_FROM	STRING	Name of the service participant of the prior transaction
SERVICE_PART_NAME_TO	STRING	Name of the service participant of the current transaction
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TOT_TXFER_FARE_CREDIT	NUMBER	The total amount of all fare credits (for the current and previous legs of the passenger journey) that may be used as a fare credit on subsequent legs of the passenger journey.
TRANSIT_OP_FROM	STRING	The operator of the transit vehicle from the prior transaction
TRANSIT_OP_TO	STRING	The operator of the transit vehicle of the current transaction
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
TXN_VALUE	NUMBER	Transactions involving a purse only: The financial amount of the transaction.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)
UPGRADE_TXN	NUMBER	"Purse Use" and "Purse Rebate on Exit" Transactions Only: Specifies whether the purse transaction is generated in conjunction with a pass or multi-ride transaction (i.e., whether the purse transaction is an upgrade fare for the pass/multi-ride), essentially paying the difference between the product face value and the calculated full fare.
VEHICLE_TYPE_DESC	STRING	The description of the vehicle type.
VEHICLE_TYPE_ID	NUMBER	The unique identifier of the vehicle type (e.g., bus, truck, trailer, etc.) for the journey (WSF only). Set to zero for transactions where no passenger vehicle is involved.

B.2.7   AV_LIABILITY_WRITEOFF

This view is for transactions that record the write-off of the product issuer's asset (if the net value of transactions is positive) or liability (if the net value of transactions is negative) as a counterpart to one or more product revalue and/or usage transactions. These

transactions debit (if the net value of transactions is positive) or credit (if the net value of transactions is negative) the PCF. Table 149 describes the liability write-off data elements.

Table 84: Liability Write-Off Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason
BRANCH	STRING	The description of the branch of the institution for this agreement.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.

Name	Format	Description
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SETTLEMENT_DATE	DATETIME	The settlement date that the write-off transaction was effected.
WRITE_OFF_AMOUNT	NUMBER	The (signed) amount written off

B.2.8   AV_ORDER_DETAILS

This view is to identify the details of an order placed within the RFCS. Table 85 describes the order details data elements.

Table 85: Order Details Data

Name	Format	Description
ACTION_LIST_EXP_DATE	DATETIME	When applicable, this will show the date when the product will expire if the card is not tagged
BRANCH	STRING	Name of branch tied to order
CARD_GROUP	STRING	Name of card group tied to order
CARD_SERIAL_NUMBER	NUMBER	Card serial numbers tied to product order
CON_BILL_COMM_DATE	DATETIME	Contract billing commencement date from agreement details
CON_COMM_DATE	DATETIME	Contract commencement date from agreement details
CON_EXP_DATE	DATETIME	From agreement details
INSTITUTION_ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION_NAME	STRING	Name of institution tied to agreement details and associated with order
LEAD_AGENCY	STRING	From agreement details
ORDER_DATE	DATETIME	Original order date
ORDER_NUMBER	NUMBER	Card or product order number generated from the BA Website, Call Center Website, etc.

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Name	Format	Description
ORDER_STATUS_	STRING	Last updated status of order
ORDER_STATUS_DATE	DATETIME	Date of last order status update
PAYMENT_METHOD	STRING	From agreement details
PAYMENT_TERMS	STRING	From agreement details
PRICE	NUMBER	Price associated with each retail product in order
PRODUCT	STRING	Product ordered, if any
PROGRAM	STRING	Program associated with product order
VALIDITY_PERIOD	DATETIME	The month/year associated with any period products

B.2.9 AV_RECOVERED_REVALUE

This view is for recording the recovery of a transaction that involved the purchase of electronic value on a card, where the original transaction did not reach the Clearinghouse. Transactions that record the topping off of purse and multi-ride value, the purchase of a new pass or multi-ride product, and the extension of pass product validity may be recovered. Table 151 describes the recovered revalue data elements.

Table 86: Recovered Revalue Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason
BRANCH	STRING	The description of the branch of the institution for this agreement.
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.

Name	Format	Description
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred
PAYMENT_METHOD_DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD_ID	NUMBER	The unique identifier of the payment method used to effect payment for the original purchase. Note that where multiple payment methods were used, the payment method will indicate "multiple."
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.

Name	Format	Description
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_REMAINING_VALUE	NUMBER	Purse value only: The remaining purse value after completion of this transaction.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
REMAINING_RIDES	NUMBER	Multi-ride value only: The remaining number of rides after completion of this transaction.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_AMOUNT	NUMBER	The total amount of the transaction.
TXN_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

Name	Format	Description
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)
V_END_DATE_TIME	DATETIME	The time when the product's validity terminates (i.e., the product becomes invalid at the end of this time). If the product is a Floating Period Pass, this field will be zero.
V_START_DATE_TIME	DATETIME	The time when the product's validity commences (i.e., the product becomes valid at the start of this time). If the product is a Floating Period Pass, this field will be zero.

B.2.10   AV_REVALUE_TRANSACTIONS

This view is for transactions that record the purchase of electronic value on a card. This includes topping off purse and multi-ride value, purchase of a new pass or multi-ride product, and the extension of pass product validity.

Table 152 describes the revalue transaction data elements.

Table 87: Revalue Transaction Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason
BRANCH	STRING	The description of the branch of the institution for this agreement.
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., DESFire)
CARD_TYPE_ID	NUMBER	The unique ID of the type of the card associated with the transaction.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	NUMBER	The unique identifier - Card Serial Number - of the physical card.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event

Name	Format	Description
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
EFT_SETTLEMENT_DATE	DATETIME	Credit card payment used only: The settlement date.
EFT_TERMINAL_ID	STRING	Credit card payment used only: The terminal ID.
EFT_TRACE_NUMBER	STRING	Credit card payment used only: The trace number.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The local date/time the revalue transaction took place.

Name	Format	Description
NUMBER_OF_PAYMENTS	NUMBER	The number of methods used to effect payment for the purchase.
PAYMENT_METHOD0	NUMBER	The unique identifier of Payment Method 1
PAYMENT_METHOD0_DESC	STRING	The description of the method of payment 1 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD1	NUMBER	If more than one method of payment was used to effect the transaction: The unique identifier of Payment Method 2
PAYMENT_METHOD1_DESC	STRING	The description of the method of payment 2 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD2	NUMBER	If more than two methods of payment were used to effect the transaction: The unique identifier of Payment Method 3
PAYMENT_METHOD2_DESC	STRING	The description of the method of payment 3 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD3	NUMBER	If more than three methods of payment were used to effect the transaction: The unique identifier of Payment Method 4
PAYMENT_METHOD3_DESC	STRING	The description of the method of payment 4 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_VALUE0	NUMBER	The amount paid using Payment Method 1.
PAYMENT_VALUE1	NUMBER	The amount paid using Payment Method 2.
PAYMENT_VALUE2	NUMBER	The amount paid using Payment Method 3.
PAYMENT_VALUE3	NUMBER	The amount paid using Payment Method 4.
PREPAYMENT_PREF	NUMBER	Prepayment (credit card or check) used only: The prepayment reference number.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer

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Name	Format	Description
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_ID	NUMBER	Purse payment used only: The unique ID of the purse.
PURSE_REMAINING_VALUE	NUMBER	Purse value only: The remaining purse value after completion of this transaction.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
REMAINING_RIDES	NUMBER	Multi-ride value only: The remaining number of rides after completion of this transaction.
REVERSED_UDSN	NUMBER	Reversal transactions only: The UDSN of the original transaction being reversed.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PARTICIPANT_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_AMOUNT	NUMBER	The total amount of the transaction.
TXN_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

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Name	Format	Description
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)
V_END_DATE_TIME	DATETIME	The time when the product's validity terminates (i.e., the product becomes invalid at the end of this time). If the product is a Floating Period Pass, this field will be zero.
V_START_DATE_TIME	DATETIME	The time when the product's validity commences (i.e., the product becomes valid at the start of this time). If the product is a Floating Period Pass, this field will be zero.
VIA_ACTIONLIST	NUMBER	Indicates if the addition of electronic value was effected via actionlisting (1 = true, 0 = false)

B.2.11   AV_SALES_ADHOC

This view shows all sales transactions and associated detail. Table 88 describes the sale data elements.

Table 88: Sales Adhoc Data

Name	Format	Description
CSN	NUMBER	The unique number of the card that the transaction affected.
DEVICE_ID	NUMBER	When applicable, this will be the device ID PSN (Physical Serial Number) associated with device used to perform the sales transaction.
DEVICE_ID_ESN	NUMBER	When applicable, this will be the device ID ESN (Electronic Serial Number) associated with the device used to perform the sales transaction.
LOAD_AGENT	STRING	The name of the participant that made the sale.
LOAD_AGENT_ID	NUMBER	The unique identifier associated with the participant that made the sale.
OPERATOR_ID	NUMBER	Operator ID associated with login. Currently the Operator CSN for the CST and first initial + last name for websites
OPERATOR_SHIFT_NUMBER	STRING	The operator shift ID in which the transaction took place (based on the device).
PAYMENT_AMOUNT	NUMBER	The amount associated with the payment method of the transaction.
PAYMENT_AUTH_NUMBER	STRING	Merchant credit card authorization number associated with specific payments
PAYMENT_METHOD	STRING	The method by which the product sale was affected.

Name	Format	Description
PAYMENT_METHOD_ID	NUMBER	The ID of the method by which product sales were affected.
PAYMENT_REF_NUMBER	STRING	(check number, money order number, last four digits for credit card or debit card, PO number, voucher number)
PRODUCT	STRING	The product that was sold.
PRODUCT_ID	NUMBER	The unique identifier of the type of product sold.
PRODUCT_ISSUER	STRING	The name of the agency that issues the product that was sold.
PRODUCT_ISSUER_ID	NUMBER	The unique identifier associated with the agency that issues the product that was sold.
RECEIPT_NUMBER	NUMBER	The receipt number of the sales transaction – used for grouping all line items/payment methods/amounts for a transaction.
RECONCILIATION_DATE	DATETIME	The reconciliation date of the transactions in the summary.
SALES_CHANNEL	STRING	The description of the sales channel through which the products were sold (e.g., Walk-In Center).
SALES_LOCATION	STRING	The description of the location at which a product was sold.
SETTLEMENT_DATE	DATETIME	The date appended to transactions at the clearinghouse
SHIFT_NUMBER	NUMBER	The unique identifier of the shift associated with the sales transaction
TXN_DATE	DATETIME	The calendar date on which the transaction was made.
TXN_DESCRIPTION	STRING	The type of transaction that was performed (Add Value, Product Purchase, etc.).
TXN_SUBTYPE	NUMBER	The ID of the sub-type of the settled transaction.
TXN_TYPE	NUMBER	The ID of the type of the settled transaction.
USER_ID	STRING	User name associated with login - currently first initial + last name

B.2.12　AV_SERVICE_RECIEPT_DETAILS

This view is for service receipt details. Table 89 describes the service receipt details data elements.

Table 89: Service Receipt Details Data

Name	Format	Description
CSN	NUMBER	The unique serial number associated with, and printed on, the card with which the transaction is associated.
DEVICE_ID	NUMBER	When applicable, this will be the device ID associated with device used to perform the sales transaction.
FEE_AMOUNT	NUMBER	Card fees, refund fees, autoload configure fees, etc.
FUNDING_SOURCE	STRING	Payment source for automatic revalue - this would be the last four numbers of the credit card to be charged when product is revalued.
LOCATION	STRING	Similar to sales location. For example, Lynnwood RideStore, King Street Station, Call Center Website.
PARTICIPANT_NAME	STRING	Name of agency that performed the service.
PARTICIPANT_ID	NUMBER	Should relate to agency that performed the service. Participant ID may be acceptable here if it tells us who performed the service and who is responsible for follow up actions such as sending out a refund check.
PAYMENT_METHOD	STRING	Method of payment for fees if any - cash, credit card, check, e-purse, etc.
PRODUCT_DESCRIPTION	STRING	Name of product ordered
PRODUCT_VALIDITY_PERIOD	DATETIME	The month/year associated with any period products
PURSE_REVALUE_AMOUNT	NUMBER	Amount of purse ordered for each card
RECEIPT_NUMBER	NUMBER	Number associated with receipt generated for zero dollar service performed on behalf of customer.
REMAINING_VALUE	NUMBER	Amount of e-purse to transfer to the replacement card after deduction of any fees
SERVICE_TYPE	STRING	Configure Autoload, card replacement, refund, issue new card, etc. Data displayed in this field should match what is displayed on the customer receipt.
TXN_DATE	DATETIME	Date/Time of transaction
USER_ID	STRING	User name associated with login - currently first initial + last name

B.2.13   AV_TRANSACTION_DETAILS

This view is for transaction details, used as a basis for financial clearing. Table 90 describes the transaction details data elements.

Table 90: Transaction Details Data

Name	Format	Description
BRANCH	STRING	The description of the branch of the institution for this agreement.
CSN	NUMBER	The unique serial number associated with, and printed on, the card with which the transaction is associated.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transactions in the summary are (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique ID of the device that generated the transactions in the summary.
GFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed good for settlement (GFS).
GFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed GFS.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	Will contain an ID value if the products associated with the transactions in the summary are Institutional products.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
NGFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed not good for settlement (NGFS).

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Name	Format	Description
NGFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed NGFS.
PAYMENT_METHOD_DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD_ID	NUMBER	The unique identifier of the method of payment on the transactions in the summary.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
RECON_DATE	DATETIME	The reconciliation date of the transactions in the summary.
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transactions in the summary were generated.
SETTLEMENT_DATE	DATETIME	The settlement date of the transactions in the summary.
SOURCE_OF_TXN	STRING	(Location) Call Center, Mail Center, etc.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transactions in the summary. This is generally the owner of the device that generated the transactions.
TXN_AMOUNT	NUMBER	The amount of the transaction
TXN_DATE	DATETIME	Date of the transaction
TXN_DESC	STRING	Description of the transaction, such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

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Name	Format	Description
UDSN	STRING	UDSN associated with the transaction

B.2.14   AV_TRANSACTION_SUMMARY

This view is for transaction summaries, used as a basis for financial clearing. Table 156 describes the transaction summary data elements.

Table 91: Transaction Summary Data

Name	Format	Description
BRANCH	STRING	The description of the branch of the institution for this agreement.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transactions in the summary are (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique ID of the device that generated the transactions in the summary.
GFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed good for settlement (GFS).
GFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed GFS.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address.
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address.
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	Will contain an ID value if the products associated with the transactions in the summary are Institutional products.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
NGFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed not good for settlement (NGFS).

Name	Format	Description
NGFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed NGFS.
PAYMENT_METHOD_DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD_ID	NUMBER	The unique identifier of the method of payment on the transactions in the summary.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product.
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold.
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer.
RECON_DATE	DATETIME	The reconciliation date of the transactions in the summary.
SERVICE_PART_NAME	STRING	Name of the service participant.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transactions in the summary were generated.
SETTLEMENT_DATE	DATETIME	The settlement date of the transactions in the summary.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transactions in the summary. This is generally the owner of the device that generated the transactions.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

B.2.15 AV_WO_AND_CO_STATUS

This view is for viewing work orders associated to card orders where applicable. Table 92 describes the WO and CO Status data elements.

Table 92: WO and CO Status

Name	Format	Description
CARD_ORDER_NO	NUMBER	The number that identifies the unique card order.
CARD_TYPE_DESC	STRING	The description of the type of card being ordered.
CARD_TYPE_ID	NUMBER	The unique ID of the type of card being ordered.
CSN	NUMBER	The card serial number of the card - associated with an accepted, shipped, or rejected card order.
ORDER_OWNER	STRING	The owner of the card order.
ORDER_STATUS	STRING	The description of the most recent order status.
ORDER_STATUS_ID	NUMBER	The identifier of the most recent order status.
ORDER_TYPE	STRING	The descriptive type of card order.
ORDER_TYPE_ID	NUMBER	The identifier of the type of order the card is associated.
ORDERING_PARTY_ID	NUMBER	The unique identifier of the party that created the card order.
ORDERING_PARTY_NAME	STRING	The descriptive name of the Ordering Party.
UPDATED_BY	STRING	The description of the user most recently updating the wo/co. As is viewed on the Agency website, Card orders & inventory management Card order details.
WORK_ORDER_NO	NUMBER	The unique number assigned to the work order associated with the card order.

B.3   Device Events

This section describes the database business views associated with events that occur at a device.

B.3.1   AV_ATTEMPTED_LOGON

This view is for the device event that records an attempted operator logon (successful or unsuccessful) to a device. Table 157 describes the attempted logon data elements.

Table 93: Attempted Logon Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.

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Name	Format	Description
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_DESC	STRING	The description of the event.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator who attempted to log on to the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.3.2   AV_DEVICE_CONFIGURATION

This view is for the device notification event that records what CD is currently in a device. Table 158 describes the device configuration data elements.

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Table 94: Device Configuration Data

Name	Format	Description
CD_NAME_LIST	STRING	The unique CD payload name.
CD_VERSION_LIST	STRING	The version of the CD set from which this payload was generated.
DEST_PART_NAME	STRING	Name of the destination participant.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_DESC	STRING	The description of the event.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred
LOCATION	NUMBER	The specific location of the device.
LOCATION_TYPE	NUMBER	The unique identifier of the category of location (e.g., BUS STOP, RAILWAY STATION, FERRY DOCK, etc.) of the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PART_NAME	STRING	Name of the service participant
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.

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Name	Format	Description
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

B.3.3   AV_LOGOFF

This view is for the device event that records the logging off of an operator from a device. Table 159 describes the logoff data elements.

Table 95: Logoff Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_DESC	STRING	The description of the event.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
LOGOFF_METHOD_DESC	STRING	The description of the logoff method (e.g., manual, timeout, etc.).
LOGOFF_METHOD_ID	STRING	The unique identifier of the method by which the operator was logged off.
OPERATOR_ID	STRING	The ID of the operator who was logged off from the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant.

Name	Format	Description
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.3.4   AV_LOGON_FAILURE

This view is for the device event that records an operator's failed attempt to log on to a device. Table 160 describes the logon failure data elements.

Table 96: Logon Failure Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the failed logon (e.g., DESFire).
CARD_TYPE_ID	STRING	The unique identifier of the card associated with the failed logon.
CSN	NUMBER	The unique Card Serial Number of the physical card associated with the failed logon.
DEST_PART_NAME	STRING	Name of the destination participant.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.

Name	Format	Description
EVENT_TYPE_DESC	STRING	The description of the event.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
LOGON_FAIL_REASON_DESC	STRING	The description of the logon failure reason (e.g., blocked operator application, invalid PIN).
LOGON_FAIL_REASON_ID	NUMBER	The unique identifier of the reason why the logon attempt failed.
REPEATED_FAILURE_BLOCK	STRING	Identifies whether or not the operator card is blocked due to repeated logon failures. (Yes/No)
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.3.5   AV_NON_FARECARD_EVENTS

This view is for the non fare card events that are manually entered into a device. Table 97 describes the non fare card events data elements.

Table 97: Non Fare Card Event Data

Name	Format	Description
COUNTER_DESC	STRING	The description of the non-fare card counter (e.g. Adult Full Fare).
COUNTER_ID	NUMBER	The unique ID associated with the counter.

Name	Format	Description
OPERATOR_ID	NUMBER	The Operator ID of who is logged in to the device associated with the counter event.
RIDERSHIP	NUMBER	1 if the counter is classified as "Ridership" and 0 if the counter is classified as "Information".
ROUTE_DIRECTION	STRING	The direction of the route as either Inbound or Outbound.
ROUTE_ID	NUMBER	The identifier associated with the Route (e.g. 594).
SERVICE_PARTICIPANT_NAME	STRING	The service participant associated with the counter event (determines counter ridership state).
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the service participant.
SOURCE_PARTICIPANT_NAME	STRING	The source participant associated with the boarding of the counter event (not associated with the ridership state of the counter).
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the source participant.
TRANSIT_OPERATOR	STRING	The operator of the service in which the counter event is associated.
TRIP_ID	STRING	The id associated with the trip in which the counter event occurred.
TRIP_START	NUMBER	The minutes after midnight in which the trip is scheduled to begin.
TXN_AMOUNT	NUMBER	The amount associated with the counter event (boarding value).
TXN_DATE	DATETIME	The actual date the counter event was captured.

B.3.6   AV_OTHER_EVENTS

This view is for all other events. Table 161 describes the data elements for other events.

Table 98: Other Events Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
DEST_PART_NAME	STRING	Name of the destination participant
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.

Name	Format	Description
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_DESC	STRING	The description of the event.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event (e.g., incomplete CD, UD storage full, flash memory fault, etc.).
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
LOCATION	NUMBER	The specific location of the device.
LOCATION_TYPE	NUMBER	The unique identifier of the category of location (e.g., BUS STOP, RAILWAY STATION, FERRY DOCK, etc.) of the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.3.7   AV_SHIFT_START_END

This view is for the device event that records an operator's starting/ending a shift at a device. Table 162 describes the shift start/end data elements.

Table 99: Shift Start/End Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason.
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the shift logon.
CARD_TYPE_ID	STRING	Operator card used to logon the device only: The unique identifier of the type of operator card associated with the logon to the device on which the shift was started.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false).
CSN	NUMBER	Operator card used to log on to the device only: The unique Card Serial Number of the operator card associated with the logon to the device on which the shift was started.
DEST_PART_NAME	STRING	Name of the destination participant.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false).
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.

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Name	Format	Description
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator that started the shift.
OPERATOR_SHIFT_NUMBER	NUMBER	The operator's shift number.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
START_END_INDICATOR	NUMBER	An indicator of whether this is the start or end of a shift.
TRANSIT_OPERATOR	STRING	The operator of the transit vehicle. This is understood to either be Community Transit or First Transit when referenced.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.3.8   AV_TRIP_START_END

This view is for the device event that records an operator's starting/ending a trip. Table 163 describes the trip start/end data elements.

Table 100: Trip Start/End Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason.

Name	Format	Description
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false).
CSN	NUMBER	Card Serial Number associated with the trip operator.
DEST_PART_NAME	STRING	Name of the destination participant.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false).
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator that started/ended the trip.
OPERATOR_SHIFT_NUMBER	NUMBER	The operator's shift number.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.

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Name	Format	Description
ROUTE_DIRECTION	STRING	The direction in which the trip was started/ended.
ROUTE_ID	NUMBER	The unique identifier of the route variant associated with the trip that was started/ended.
RUN_ID	NUMBER	The run number (block number) for the trip that was started/ended.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PART_NAME	STRING	Name of the service participant.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TRANSIT_OPERATOR	STRING	The operator of the vehicle.
TRIP_ID	NUMBER	Unique identifier of the trip that was started/ended.
TRIP_START_END_INDICATOR	NUMBER	An indicator of whether this is the start or end of a trip. (START/END)
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.4 Institutional

This section describes the database business views associated with specific items of Institutional data.

B.4.1   AV_INSTITUTIONAL_BILLING

This view is for the Institutional Billing data that identifies the information needed in order to accurately perform monthly billing. Table 101 describes the Institutional Billing data elements.

Table 101: Institutional Billing Data

Name	Format	Description
BILLING_MMYY	DATETIME	The Month/Year that indicates the month being billed.
BILLING_TYPE	STRING	The billing type associated with the invoice to the institution for right to ride program usage.
BRANCH	STRING	Name of branch tied to transaction
CARD_COUNT	NUMBER	The number of cards used on the transaction date.
CARD_GROUP	STRING	Name of card group tied to transaction
CARD_SERIAL_NUMBER	NUMBER	The unique serial number associated with, and printed on the card in which the transaction is associated.
DELIVERY_METHOD	STRING	Remote or Automatic delivery of the transaction. (not applicable to R2R transactions)
INSTITUTION_ID	NUMBER	The unique identifier of the institution
INSTITUTION_NAME	STRING	The name of the institution
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional Agreement.
ORDER_NUMBER	NUMBER	Card or product order number generated from the BA Website
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PROGRAM_TYPE_DESC	STRING	Description of the product: Right-to-Right, Vouchers, Customized Programs, or Commercial Account Programs
PROGRAM_TYPE_ID	NUMBER	The unique identifier to the applicable program type associated with the transaction.

Name	Format	Description
REDEEMED	STRING	Yes or No value to indicate if the product has been redeemed. (not applicable to R2R transactions)
TXN_AMOUNT	NUMBER	The actual transaction amount (prior to apportionment)
TXN_COUNT	NUMBER	The count of actual transactions on the transaction date
TXN_DATE	DATETIME	The calendar date/time of the transaction

B.4.2   AV_INSTITUTIONS_CRM

This view is for the Institutional CRM data that identifies Institutional contract details. Table 102 describes the Institutions CRM data elements.

Table 102: Institutions CRM Data

Name	Format	Description
AGREEMENT_STATUS_DATE	DATETIME	Date/time of last account status update
AGREEMENT_TYPE	STRING	Manual or Online
CONTRACT_BILLING_COMM_DATE	DATETIME	Contract billing commencement date/time from agreement details
CONTRACT_COMM_DATE	DATETIME	Contract commencement date/time from agreement details
CONTRACT_EXPIRATION_DATE	DATETIME	From agreement details
DATE_APPROVED	DATETIME	Date/time of order approved by lead agency
INSTITUTION_CONTACT_NAME	STRING	From agreement details
INSTITUTION_CONTACT_PHONE	STRING	From agreement details
INSTITUTION_ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION_NAME	STRING	Name of institution tied to agreement details and associated with order
INSTITUTION_STATUS	STRING	Current account status
LEAD_AGENCY	STRING	Lead agency name
LEAD_AGENCY_CONTACT_NAME	STRING	From agreement details
LEAD_AGENCY_ID	NUMBER	Unique identifier of the lead agency associated with the agreement.
PROGRAM	STRING	Program associated with product order
PROGRAM_CATEGORY	STRING	Campus, Employer, or Human Services

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B.4.3   AV_INSTITUTION_ORDERS

This view is for Institutional order data. Table 103 describes the Institution Order data elements.

Table 103: Institution Orders Data

Name	Format	Description
BRANCH	STRING	Name of branch tied to order
INSTITUTION_ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION_NAME	STRING	Name of institution tied to agreement details and associated with order
LEAD_AGENCY_ID	NUMBER	Unique identifier of the lead agency associated with the agreement.
LEAD_AGENCY	STRING	Lead agency name
ORDER_DATE	DATETIME	Original order date and time.
ORDER_NUMBER	NUMBER	Product order number or card order number
ORDER_STATUS	STRING	Last updated status of order
ORDER_STATUS_DATE	DATETIME	Date and time of last order status update

B.4.4   AV_INSTITUTIONAL_TXN_DETAIL

This view is for Institutional transaction data. Table 104 describes the Institutional Transaction Detail data elements.

Table 104: Institutional Transaction Detail Data

Name	Format	Description
BRANCH	STRING	The applicable branch of the Institution associated with the transaction.
BUSINESS_DATE	DATETIME	The actual business service date in which the transaction is associated.
CARDHOLDER_ADDRESS1	STRING	First line of the cardholder's address. Will be blank if an anonymous card.
CARDHOLDER_ADDRESS2	STRING	Second line of the cardholder's address. Will be blank if an anonymous card.
CARDHOLDER_CITY	STRING	Cardholder City. Will be blank if an anonymous card.
CARDHOLDER_FIRSTNAME	STRING	The first name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.

Name	Format	Description
CARDHOLDER_ID	NUMBER	The unique ID of the holder of the fare card associated with the transaction (if applicable).
CARDHOLDER_LASTNAME	STRING	The last name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_STATE	STRING	Cardholder State. Will be blank if an anonymous card.
CARDHOLDER_ZIP	STRING	Cardholder ZIP. Will be blank if an anonymous card.
CHANNEL	STRING	The sales channel associated with purchase transaction (when applicable).
CSN	STRING	The unique Card Serial Number associated with the transaction.
DEVICE_ID	NUMBER	The unique identifier (SSN) of the device used to capture the transaction.
DEVICE_TYPE_ID	STRING	The type of device used to capture the transaction.
INSTITUTION_ID	NUMBER	The unique identifier of the associated Institution.
INSTITUTION_NAME	STRING	The name of the associated Institution.
LEAD_AGENCY_ID	NUMBER	The unique identifier of the lead agency associated with the Institution.
LEAD_AGENCY_NAME	STRING	The name of the lead agency.
LOCAL_DATE_TIME	DATETIME	The date and time (MM/DD/YY HH:MM:SS) associated with the transaction.
LOCATION	STRING	The location in which the transaction took place (e.g., Lynnwood RideStore).
PASSENGER_TYPE_DESC	STRING	The description of the passenger type associated with the product/card.
PASSENGER_TYPE_ID	NUMBER	The unique ID associated with the passenger type of the product/card.
PAYMENT_METHOD0	STRING	The payment method associated with the transaction (when applicable).
PAYMENT_METHOD1	STRING	The second payment method associated with the transaction (when applicable).
PRODUCT_DESC	STRING	The product associated with the transaction.

Name	Format	Description
ROUTE_DIRECTION	STRING	The direction of the route (Inbound, Outbound, N, E, W, etc.).
ROUTE_ID	NUMBER	The route associated with the transaction.
ROUTE_VARIANT_ID	NUMBER	The route variant associated with the transaction.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the operator on whose behalf the UD transaction is generated.
SERVICE_PARTICIPANT_NAME	STRING	The name of the service participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the commissioned owner of the device on which UD transactions are generated.
SOURCE_PARTICIPANT_NAME	STRING	The descriptive name of the source participant.
TRANSIT_OPERATOR	STRING	The operator of the transit vehicle.
TRIP_ID	NUMBER	The trip ID associated with the transaction.
TRIP_START	NUMBER	Minutes after midnight that the TRIP_ORIGINAL_ID started.
TXN_AMOUNT	NUMBER	The amount of the transaction.
TXN_DESC	STRING	The description of the transaction.
VEHICLE_ID	STRING	The ID of the vehicle associated with the transaction (if applicable).
VOUCHER_PAYMENT	STRING	Was the transaction a voucher? (Yes/No)

B.5   Configuration Data

This section describes the database business views associated with specific items of CD.

B.5.1   AV_CD_DIST_DETAILS

This view is for CD distribution detail data. Table 105 describes the CD distribution detail data elements.

Table 105: CD Distribution Detail Data

Name	Format	Description
ACTIVATION_TIME	DATETIME	The date/time in which the current set was activated.

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Name	Format	Description
CONSISTENT_SET_RELEASE	NUMBER	The release in which the consistent set is associated.
CONSISTENT_SET_VERSION	NUMBER	The version of the consistent set.
DISTRIBUTION_ID	NUMBER	The unique identifier of the current CD statistics. This is the "current" version of the Configuration Data loaded on the device.
FUTURE_ACTIVATE_TIME	DATETIME	The date/time in which the future set will be active.
FUTURE_IMPORT_SET_NAME	STRING	The name of the future import set.
FUTURE_SET_RELEASE	NUMBER	The release in which the future set is associated.
FUTURE_SET_VERSION	NUMBER	The version of the future set.
IMPORT_SET_NAME	STRING	The name of the import set.
PARTICIPANT_ID	NUMBER	The unique identifier of the participant in which the CD is associated.
SET_DISTRIBUTE_STATE	STRING	The state of the current distribution set.

B.5.2   AV_CD_ROUTE_DATA

This view is for route data. Table 106 describes the CD Route data elements.

Table 106: CD Route Data

Name	Format	Description
DATE_ARRIVED	DATETIME	Date/time the CD route data arrived
FUTURE_ACTIVATED	STRING	Future activated
IMPORT_ROUTE_ID	STRING	Import Route ID
IMPORT_ROUTE_VARIANT_ID	STRING	Import Route Variant ID
MASSETR	NUMBER	Massetr number
PARENT_ROUTE_NAME	STRING	Name of the route
PARTICIPANT_ID	NUMBER	Unique identifier associated with the participant of the route
ROUTE_VARIANT_ID	NUMBER	Route variant ID associated with the route
ROUTE_VARIANT_NAME	STRING	Name of the route variant
TRANSIT_OPERATOR	STRING	Transit Operator associated with the route

B.5.3   AV_CD_TRIP_DATA

This view is for trip data. Table 107 describes the CD Trip data elements.

Table 107: CD Trip Data

Name	Format	Description
FUTURE_ACTIVATED	STRING	Future Activated
MASSETR	NUMBER	Massetr number
PARTICIPANT_ID	NUMBER	Participant who owns the trip
ROUTE_VARIANT_ID	NUMBER	Route variant ID associated with the trip
TRIP_DESCRIPTION	STRING	Trip name/description
TRIP_END	NUMBER	Minutes after midnight in which trip ends
TRIP_ID	NUMBER	ERG trip ID
TRIP_ORIGINAL_ID	STRING	The trip ID as set by the Participant
TRIP_START	NUMBER	Minutes after midnight in which trip started

B.6   Lookup Data

This section lists the data used to support the translation of coded information in the other data structures by providing descriptions against each code.

B.6.1   AV_ABORT_REASON_LOOKUP

This view is for mapping IssuerAbortReason unique identifiers to the description of the failed integrity check. Table 167 describes the abort reason data elements.

Table 108: Abort Reason Data

Name	Format	Description
ABORT_REASON_ID	NUMBER	The unique identifier of any reason why the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason.

B.6.2   AV_ACCOUNT_LOOKUP

This view is for mapping unique identifiers to the description of a settlement account. Table 168 describes the account lookup data elements.

Table 109: Account Lookup Data

Name	Format	Description
ACCOUNT_ID	NUMBER	The unique settlement account number

Name	Format	Description
ACCOUNT_TYPE_DESC	STRING	The description of the type of settlement account
ACCOUNT_TYPE_ID	NUMBER	The unique identifier of the type of settlement account
PARTICIPANT_ID	NUMBER	The participant associated with the settlement account

B.6.3   AV_ADJUSTMENT_REASON_LOOKUP

This view is for mapping ManualAdjustmentReason unique identifiers to the description of the logon failure reason. Table 169 describes the manual adjustment reason data elements.

Table 110: Adjustment Reason Data

Name	Format	Description
ADJUSTMENT_REASON	STRING	A 3-character value representing the reason for adjustment
ADJUSTMENT_REASON_DESC	STRING	The description of the reason for adjustment

B.6.4   AV_BLOCK_REASON_LOOKUP

This view is for mapping Block_Reason_ID unique identifiers to the description of the block reason. Table 111 describes the block reason data elements.

Table 111: Block Reason Data

Name	Format	Description
BLOCK_REASON_DESC	STRING	The descriptive reason for a card to be blocked
BLOCK_REASON_ID	NUMBER	The unique identifier associated with the block reason

B.6.5   AV_CARD_PLACE_LOCATION

This view is for mapping card location identifiers to the location name in association with inventory. Table 112 describes the card place location data elements.

Table 112: Card Place Location

Name	Format	Description
GLOBAL_NAME	STRING	The agency identifier of the card location
LOCATION_NAME	STRING	The detailed description of the card location
PLACE_ID	STRING	The unique identifier of the card location

B.6.6   AV_CARD_STATUS_LOOKUP

This view is for mapping unique identifiers to the description of a card status. Table 113 describes the card status lookup data elements.

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Table 113: Card Status Lookup Data

Name	Format	Description
CARD_STATUS_DESC	STRING	The description of the card status (e.g., Blocked)
CARD_STATUS_ID	NUMBER	The unique identifier of the card status

B.6.7   AV_CARD_TYPE_LOOKUP

This view is for mapping unique identifiers to the description of a card type. Table describes the card type lookup data elements.

Table 114: Card Type Lookup Data

Name	Format	Description
CARD_TYPE_DESC	STRING	The description of the type of card (e.g., DESFire)
CARD_TYPE_ID	NUMBER	The unique identifier of the card type

B.6.8   AV_CARDHOLDER_LOOKUP

This view is for mapping unique identifiers to the description of cardholders. Table 171 describes the cardholder lookup data elements.

Table 115: Cardholder Lookup Data

Name	Format	Description
CARDHOLDER_ADDRESS1	STRING	First line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER_ADDRESS2	STRING	Second line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER_CITY	STRING	Cardholder City. Will be BLANK if an anonymous card.
CARDHOLDER_EMAIL	STRING	Cardholder Email if known. Will be BLANK if an anonymous card.
CARDHOLDER_FIRSTNAME	STRING	The first name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_ID	NUMBER	The unique Identifier for a cardholder.
CARDHOLDER_LASTNAME	STRING	The last name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_STATE	STRING	Cardholder State. Will be BLANK if an anonymous card.
CARDHOLDER_ZIP	STRING	Cardholder ZIP. Will be BLANK if an anonymous card.

B.6.9   AV_CLAIM_STATUS_LOOKUP

This view is for mapping unique identifiers to the description of claim status. Table 172 describes the claim status lookup data elements.

Table 116: Claim Status Lookup Data

Name	Format	Description
CLAIM_STATUS_DESC	STRING	The description of the claim status (e.g., Pending).
CLAIM_STATUS_ID	NUMBER	The unique identifier associated with the claim status.

B.6.10   AV_DEVICE_STATUS_LOOKUP

This view is for mapping unique identifiers to the description of a device status. Table 117 describes the device status lookup data elements.

Table 117: Device Status Lookup Data

Name	Format	Description
DEVICE_STATUS_ID	NUMBER	The unique identifier associated with the device status.
DEVICE_STATUS_DESC	STRING	The detailed description of the status of a device.

B.6.11   AV_EVENT_TYPE_LOOKUP

This view is for mapping EventType unique identifiers to the description of the event. Table describes the event type data elements.

Table 118: Event Type Data

Name	Format	Description
EVENT_TYPE_ID	NUMBER	The unique identifier of an event type.
EVENT_TYPE_DESC	STRING	The description of the event.

B.6.12   AV_EXCEPTION_CODE_LOOKUP

This view is for mapping unique identifiers to exception codes. Table 119 describes the exception code lookup data elements.

Table 119: Exception Code Lookup Data

Name	Format	Description
EXCEPTION_ID	STRING	The unique identifier associated with the exception code.
EXCEPTION_DESCRIPTION	STRING	The detailed description of the exception.

B.6.13   AV_FEE_TYPE_LOOKUP

This view is for mapping unique identifiers to the types of fees within the database. Table 120 describes the fee type lookup data elements.

Table 120: Fee Type Lookup Data

Name	Format	Description
FEE_TYPE	NUMBER	The unique identifier associated with the type of fee
FEE_TYPE_DESCRIPTION	STRING	The detailed description of the type of fee

B.6.14 AV_INSTITUTION_LOOKUP

This view is for mapping unique identifiers to the description of Institutions. Table describes the Institution lookup data elements.

Table 121: Institution Lookup Data

Name	Format	Description
CONTRACT_END	DATE	The last day the contract will be in effect for an Institution
CONTRACT_START	DATE	The date the contract is active and in effect for an Institution
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the institution
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement
PROGRAM_CATEGORY_ID	NUMBER	The unique identifier of the program associated with the Institutional agreement (e.g. 2 = Commercial Account)

B.6.15 AV_INST_CARD_GROUP_LOOKUP

This view is for mapping unique identifiers to the Institutional card group data. Table 122 describes the Inst Card Group lookup data elements.

Table 122: Inst Card Group Lookup Data

Name	Format	Description
BRANCH_ID	NUMBER	The unique identifier of the branch association with the card group.
BRANCH_NAME	STRING	The branch name of an institution that is associated with the card group.
INST_CARD_GROUP_ID	NUMBER	The unique identifier of an institutional card group

Name	Format	Description
INSTITUTION_ID	NUMBER	The unique identifier of the institution associated with the card group. Join to INSTITUTION_LOOKUP.

B.6.16 AV_LOGOFF_METHOD_LOOKUP

This view is for mapping LogoffMethod unique identifiers to the description of the logoff method. Table 175 describes the logoff method data elements.

Table 123: Logoff Method Data

Name	Format	Description
LOGOFF_METHOD_ID	NUMBER	The unique identifier of a method by which an operator was logged off.
LOGOFF_METHOD_DESC	STRING	The description of the logoff method.

B.6.17 AV_LOGON_FAILURE_REASON_LOOKUP

This view is for mapping LogonFailureReason unique identifiers to the description of the logon failure reason. Table describes the logon failure reason data elements.

Table 124: Logon Failure Reason Data

Name	Format	Description
LOGON_FAILURE_REASON_ID	NUMBER	The unique identifier of a reason why a logon attempt failed.
LOGON_FAILURE_REASON_DESC	STRING	The description of the logon failure reason.

B.6.18 AV_MODE_LOOKUP

This view is for mapping unique identifiers to mode descriptions. Table 125 describes the mode lookup data elements.

Table 125: Mode Lookup Data

Name	Format	Description
MODE_ABBREVIATION	STRING	The two-digit mode abbreviation as per NTD definitions
MODE_DESCRIPTION	STRING	The description of the type of transportation (e.g. Light Rail, Bus, Vanpool, etc..)
MODE_ID	NUMBER	The unique identifier associated with the mode

B.6.19 AV_NON-FARECARD_EVENT_TYPE_LOOKUP

This view is for mapping NonFareCardEvent unique identifiers to the description of the non-fare card event. Table describes the non-fare card event type data elements.

Table 126: Non-Fare Card Ridership Event Type Data

Name	Format	Description
COUNTER_DESC	STRING	The description of the counter associated with the event (e.g., Bicycle, Adult Full Fare, etc.)
COUNTER_ID	NUMBER	The unique ID associated to each counter description
RIDERSHIP	NUMBER	Identifies whether or not the counter is a Ridership statistic (1) or Informational (0)
SERVICE_PARTICIPANT_ID	NUMBER	The unique ID associated with the Service Participant (agency) associated with the counter and event
SERVICE_PARTICIPANT_NAME	STRING	The Agency associated with the event – associated with the counter

B.6.20   AV_ORDER_STATUS_LOOKUP

This view is for mapping OrderStatus unique identifiers to the description of the order status. Table 127: Order Status Data describes the order status data elements.

Table 127: Order Status Data

Name	Format	Description
ORDER_STATUS_ID	NUMBER	The unique identifier of the order status
ORDER_STATUS_DESC	STRING	The detailed description of the order status

B.6.21   AV_ORDER_TYPE_LOOKUP

This view is for mapping OrderType unique identifiers to the description of the order type. Table 128: Order Type Data describes the order type data elements.

Table 128: Order Type Data

Name	Format	Description
ORDER_TYPE_ID	NUMBER	ID of the order type
ORDER_TYPE_DESC	STRING	Description of the type of order (e.g., Work Order)

B.6.22   AV_PARTICIPANT_LOOKUP

This view is for mapping all participants within the RFCS using participant-unique identifiers to the name of the participant. These participants can be Service Participants, Source Participants, Lead Agency, Product Issuers, etc. Table 178 describes the participant data elements.

Table 129: Participant Name Data

Name	Format	Description
PARTICIPANT_ID	NUMBER	ID of the participant
PARTICIPANT_NAME	STRING	Name of the participant

B.6.23   AV_PARTICIPANT_ROLE_LOOKUP

This view is for mapping Participants to their applicable roles within the RFCS. Table 130: Participant Role Data describes the participant role data elements.

Table 130: Participant Role Data

Name	Format	Description
PARTICIPANT_ID	NUMBER	ID of the participant
PARTICIPANT_NAME	STRING	Name of the participant
ROLE_ID	NUMBER	Unique identifier of the associated role
ROLE_DESC	STRING	A detailed description of the associated role (e.g. Retailer, Load Agent, etc..)

B.6.24   AV_PASSENGER_TYPE_LOOKUP

This view is for mapping PassengerType unique identifiers to the description of the passenger type. Table describes the passenger type data elements.

Table 131: Passenger Type Data

Name	Format	Description
PASSENGER_TYPE_ID	NUMBER	ID of the passenger type
PASSENGER_TYPE_DESC	STRING	The description of the passenger type

B.6.25   AV_PASS_VEHICLE_LOOKUP

This view is for mapping passenger vehicle unique identifiers to the description of the passenger vehicle. Table 132: Pass Vehicle Lookup Data describes the pass vehicle lookup data elements.

Table 132: Pass Vehicle Lookup Data

Name	Format	Description
PASS_VEHICLE_ID	NUMBER	The unique ID of the passenger vehicle
PASS_VEHICLE_DESC	STRING	The detailed description of the passenger vehicle

B.6.26   AV_PAYMENT_METHOD_LOOKUP

This view is for mapping PaymentMethod unique identifiers to the description of the payment method. Table describes the payment method data elements.

Table 133: Payment Method Data

Name	Format	Description
PAYMENT_METHOD_ID	NUMBER	The ID of the method by which product sales were affected.
PAYMENT_METHOD_DESC	STRING	The description of the method by which product sales were affected.

B.6.27 AV_PRODUCT_CATEGORY_LOOKUP

This view is for mapping ProductCategory unique identifiers to the description of the product category. Table 134: Product Category Lookup Data describes the product category lookup data elements.

Table 134: Product Category Lookup Data

Name	Format	Description
PRODUCT_CATEGORY_ID	NUMBER	The unique ID of the product category
PRODUCT_CATEGORY_DESC	STRING	The detailed description of the product category

B.6.28 AV_PRODUCT_TYPE_LOOKUP

This view is for mapping ProductType unique identifiers to the name of the product. Table 181 describes the product type data elements.

Table 135: Product Type Data

Name	Format	Description
PARTICIPANT_ID	NUMBER	The ID of the Agency that issues the product that was sold
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the product type that was sold

B.6.29 AV_PROGRAM_CATEGORY_LOOKUP

This view is for mapping ProgramCategory unique identifiers to the description of the program category. Table 136: Program Category Data describes the program category data elements.

Table 136: Program Category Data

Name	Format	Description
PROGRAM_CATEGORY_ID	NUMBER	The unique ID of the program category
PROGRAM_CATEGORY_DESC	STRING	The detailed description of the program category

B.6.30 AV_PROGRAM_TYPE_LOOKUP

This view is for mapping ProgramType unique identifiers to the description of the program type. Table 137: Program Type Data describes the program type data elements.

Table 137: Program Type Data

Name	Format	Description
PROGRAM_TYPE_ID	NUMBER	The unique ID of the program type

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Name	Format	Description
PROGRAM_TYPE_DESC	STRING	The detailed description of the program type

B.6.31 AV_RECREDIT_REASON_LOOKUP

This view is for mapping RecreditReason unique identifiers to the description of the recredit reason. Table describes the recredit reason data elements.

Table 138: Recredit Reason Data

Name	Format	Description
RECREDIT_REASON_ID	NUMBER	The unique identifier of a recredit reason.
RECREDIT_REASON_DESC	STRING	The description of the recredit reason.

B.6.32 AV_REFUND_REASON_LOOKUP

This view is for mapping RefundReason unique identifiers to the description of the refund reason. Table 139: Refund Reason Data describes the refund reason data elements.

Table 139: Refund Reason Data

Name	Format	Description
REFUND_REASON_ID	NUMBER	Unique identifier of the reason for a card refund.
REFUND_REASON_DESC	STRING	Description of the reason code associated with a card being refunded

B.6.33 AV_RETURN_REASON_LOOKUP

This view is for mapping ReturnReason unique identifiers to the description of the return reason. Table 140: Return Reason Data describes the return reason data elements.

Table 140: Return Reason Data

Name	Format	Description
RETURN_REASON_ID	NUMBER	Unique identifier of the reason for a card being returned
RETURN_REASON_DESC	STRING	Description of the reason code associated with a card being returned

B.6.34 AV_TRANSACTION_DESCRIPTION_LOOKUP

This view is for mapping TxnType and TxnSubtype unique identifiers to a text description of the transaction. Table 183 describes the transaction description data elements.

Table 141: Transaction Description Data

Name	Format	Description
SIGN	NUMBER	Displays "1" if the value associated with the transaction is a credit. Displays "-1" if the value associated with the transaction is a debit.
TXN_DESC	STRING	Unique ID of the type of transaction

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Name	Format	Description
TXN_SUBTYPE	NUMBER	Unique ID of the sub-type of transaction
TXN_TYPE	NUMBER	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

B.6.35 AV_VANPOOL_LOOKUP

This view is for mapping VanpoolID unique identifiers to the description of the vanpool. Table 142: Vanpool Data describes the vanpool data elements.

Table 142: Vanpool Data

Name	Format	Description
AGENCY_ID	NUMBER	The unique identifier of the agency that owns the vanpool
VANPOOL_ID	NUMBER	The unique identifier of the vanpool
VANPOOL_DESC	STRING	The detailed description of the vanpool

B.6.36 AV_VEHICLE_TYPE_LOOKUP

This view is for mapping VehicleType unique identifiers to the description of the vehicle type. Table 184 describes the vehicle type data elements.

Table 143: Vehicle Type Data

Name	Format	Description
VEHICLE_TYPE_ID	NUMBER	The unique identifier of a vehicle type.
VEHICLE_TYPE_DESC	STRING	The description of the vehicle type.

B.7 Journey Data

This section describes the database business views associated with passenger journeys.

B.7.1 Billable Linked Trip

This view is for detail regarding Billable Linked Trips. Table 144 describes the Billable Linked Trip data elements.

Table 144. Billable Linked Trip Data

Name	Format	Description
BILLABLE_LINKED_TRIP_ID	NUMBER	Unique identifier for each billable linked trip (which is composed of separate unlinked trips)
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
EARNED_REVENUE	NUMBER	Revenue apportioned to this unlinked trip within the BLT for that product and period
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred
MODE ID	Number	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESC	String	The description of the type of transportation used in association with the transaction
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer

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Name	Format	Description
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)
UNLINKED_TRIP_WEIGHTING	NUMBER	Weighting of the unlinked trip, or the BLT within all associated BLTs for that product/period (if row is a BLT header instead of an unlinked trip within that BLT).

B.7.2   Linked Trip

This view is for detail regarding Linked Trips. Table 145 describes the Linked Trip data elements.

Table 145. Linked Trip Data

Name	Format	Description
CARD_TYPE_ID	NUMBER	The unique ID of the type of the card associated with the transaction.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant

Name	Format	Description
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LINKED_TRIP_ID	NUMBER	Unique identifier for each linked trip (which is composed of separate unlinked trips)
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred
MODE_ID	Number	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESC	String	The description of the type of transportation used in association with the transaction
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.

Name	Format	Description
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

B.8   Transaction Data

This section describes the database business views associated with specific transaction categories.

B.8.1   Agency Claims

This view is for the status of financial claims made by Agencies submitted to the CCH. Table 146 describes the Agency claim data elements.

Table 146. Agency Claim Data

Name	Format	Description
APPROVAL_DATE	DATETIME	The date the claim was successful and the status updated by the Fiscal Agent.
APPROVED_AMT	NUMBER	Amount of the initial claim that has been approved.
CLAIM_AMT	NUMBER	Amount initially claimed
CLAIM_DATE	DATETIME	The date the claim was entered into the system by the Fiscal Agent.
CLAIM_ID	STRING	Unique claim identifier
CLAIM_STATUS_ID	STRING	Unique identifier for claim status.
CLAIM_STATUS_DESC	STRING	The description of the current claim status
COUNTERPARTY_ID	NUMBER	The ID of the counterparty to the transaction. This is the participant that will receive an equal and opposite adjustment to their Settlement Account.

Name	Format	Description
COUNTERPARTY_NAME	STRING	Name of the counterparty
PARTICIPANT_ID	NUMBER	ID of Participant that is lodging the claim.
PARTICIPANT_NAME	STRING	Name of the participant

B.8.2　Card Refunds Ad Hoc

This view is for transactions associated with a card refund.

Table 147 describes the card refund data elements.

Table 147. Card Refunds Ad Hoc Data

Name	Format	Description
CARD STATUS	STRING	The description of the current status of the card (should be BLOCKED).
CARDHOLDER ADDRESS 1	STRING	First line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER ADDRESS 2	STRING	Second line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER CITY	STRING	Cardholder City. Will be BLANK if an anonymous card.
CARDHOLDER FIRST NAME	STRING	The first name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER ID	NUMBER	The unique Identifier for a cardholder.
CARDHOLDER LAST NAME	STRING	The last name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER STATE	STRING	Cardholder State. Will be BLANK if an anonymous card.
CARDHOLDER ZIP	STRING	Cardholder ZIP. Will be BLANK if an anonymous card.
CSN	NUMBER	The card serial number of the card the refund was processed against.
DEVICE ID	NUMBER	The identifier of the CST that initiated the refund transaction.
PARTICIPANT NAME	STRING	The party responsible for initiating the refund transaction. This will be an Agency name OR the Mail Center.
PARTICIPANT ID	NUMBER	Unique identifier to the party responsible for initiating the refund transaction.
RECEIPT NUMBER	NUMBER	Number associated with the transaction generated from CST or website.
REFUND DATE	DATE	The date the refund transaction was created and sent to the Clearinghouse for processing.
REFUND FEE	NUMBER	Amount of refund fee charged.

Name	Format	Description
REFUND REASON	STRING	The reason associated with the card (should be REFUND).
REFUNDED PURSE VALUE	NUMBER	The value that was remaining on the PURSE at the time of the refund.
TRANSFER DATE	DATE	Date funds transferred from float account to agency account.
USER ID	NUMBER	User name associated with login - currently first initial + last name.

B.8.3   Fare Payment Transactions

This view is for transactions that record the use of a product on a card for the purposes of paying to take a trip. This includes single payment and entry/exit tagging.

Table 148 describes the fare payment transaction data elements.

Table 148. Fare Payment Transaction Data

Name	Format	Description
ABORT_REASON_DESC	STRING	The description of the unique abort reason
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)
CARD_TYPE_ID	NUMBER	The unique ID of the type of the card associated with the transaction.
CASH_FARE_PAYABLE	NUMBER	The portion of the fare payable for the trip that was due to be paid in cash, as a result of insufficient funds in the purse to pay the fare (also known as the upgrade fare).
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CEFFV	NUMBER	Cash Equivalent Full Fare Value. The full fare the cardholder would expect to pay for the service if paying in cash. During the Automated Fare Collection (AFC) process, the fare actually paid is calculated as this fare less any applicable transfer fare credits, purse discounts, etc.
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.
CURR_LEG_FARE_CREDIT	NUMBER	Purse Use/Rebate on Exit Transactions Only: The amount (from the current leg of the passenger journey) that may contribute toward the total transfer fare credit for subsequent legs of the passenger journey.
DEST_PART_NAME	STRING	Name of the destination participant

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DESTINATION_LOCATION	NUMBER	Identifies the tag-off location of a transaction/non fare card event
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOSTNAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
LOCAL_DATE_TIME	DATETIME	The date associated with the journey
MODE ID	Number	The unique identifier associated with the type of transportation used in association with the transaction
MODE_DESC	String	The description of the type of transportation used in association with the transaction
MULTIRIDE_CONT_VALUE	NUMBER	Transactions involving a multi-ride only: The cash equivalent full fare value of the multi-ride contribution to the fare.

Name	Format	Description
NUMBER_OF_PASSENGERS	NUMBER	The number of passengers associated with the fare payment transaction.
NUMBER_OF_ZONES	NUMBER	The number of zones to use for fare calculation. This is only populated for fare calculation and is provided in UD and business views for fare payment transactions only.
ORIGIN_LOCATION	NUMBER	Identifies the tag-on location of a transaction/non fare card event
PASS_CONT_VALUE	NUMBER	Transactions involving a pass only: The cash equivalent full fare value of the pass contribution to the fare.
PASSENGER_TYPE_DESC	STRING	The description of the passenger type
PASSENGER_TYPE_ID	NUMBER	The unique identifier of the passenger type that was used associated with charging the fare for the trip.
PASSENGER_VEHICLE_TYPE	NUMBER	The unique identifier of the passenger vehicle type (e.g., bicycle, motorcycle, etc.) for the transaction (WSF only). Set to zero if there is no vehicle.
PREV_LEG_LOCAL_DATE_TIME	DATETIME	The date/time of the leg immediately previous to this one that is part of the current passenger journey.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_CONT_VALUE	NUMBER	Transactions involving a purse only: The cash equivalent full fare value of the purse contribution to the fare.
PURSE_REMAINING_VALUE	NUMBER	The purse value after completion of this transaction, if this transaction involved a purse.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
RECREDIT_REASON_DESC	STRING	The description of the recredit reason.

Name	Format	Description
RECREDIT_REASON_ID	NUMBER	The unique identifier for the reason for recrediting the purse.
REMAINING_RIDES	NUMBER	The number of rides remaining on the product after completion of this transaction, if this transaction involved a multi-ride.
ROUTE_DIRECTION	STRING	The direction of the route, either inbound or outbound.
ROUTE_DIRECTION_FROM	STRING	The route direction associated with the prior transaction (inbound or outbound)
ROUTE_ID	NUMBER	The route associated with the transaction/non fare card event.
ROUTE_ID_FROM	NUMBER	The route associated with the prior transaction.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PART_ID_FROM	NUMBER	The unique identifier of the operator from which the transaction/non fare card event came from.
SERVICE_PART_ID_TO	NUMBER	The unique identifier of the operator on whose behalf the journey is associated.
SERVICE_PART_NAME_FROM	STRING	Name of the service participant of the prior transaction
SERVICE_PART_NAME_TO	STRING	Name of the service participant of the current transaction
SETTLEMENT_DATE	DAETTIME	The settlement date for the transaction.
SOURCE_PART_NAME	STRING	Name of the source participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
TOT_TXFER_FARE_CREDIT	NUMBER	The total amount of all fare credits (for the current and previous legs of the passenger journey) that may be used as a fare credit on subsequent legs of the passenger journey.
TRANSIT_OP_FROM	STRING	The operator of the transit vehicle from the prior transaction
TRANSIT_OP_TO	STRING	The operator of the transit vehicle of the current transaction
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
TXN_VALUE	NUMBER	Transactions involving a purse only: The financial amount of the transaction.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

Name	Format	Description
UPGRADE_TXN	NUMBER	"Purse Use" and "Purse Rebate on Exit" Transactions Only: Specifies whether the purse transaction is generated in conjunction with a pass or multi-ride transaction (i.e., whether the purse transaction is an upgrade fare for the pass/multi-ride), essentially paying the difference between the product face value and the calculated full fare.
VEHICLE_TYPE_DESC	STRING	The description of the vehicle type.
VEHICLE_TYPE_ID	NUMBER	The unique identifier of the vehicle type (e.g., bus, truck, trailer, etc.) for the journey (WSF only). Set to zero for transactions where no passenger vehicle is involved.

B.8.4   Liability Write-Off

This view is for transactions that record the write-off of the product issuer's asset (if the net value of transactions is positive) or liability (if the net value of transactions is negative) as a counterpart to one or more product revalue and/or usage transactions. These transactions debit (if the net value of transactions is positive) or credit (if the net value of transactions is negative) the PCF. Table 149 describes the liability write-off data elements.

Table 149. Liability Write-Off Data

Name	Format	Description
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.

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Name	Format	Description
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
SETTLEMENT_DATE	DATETIME	The settlement date that the write-off transaction was effected.
WRITE_OFF_AMOUNT	NUMBER	The (signed) amount written off

B.8.5   Order Details

This view is to identify the details of an order placed within the RFCS. Table 150 describes the order details data elements.

Table 150. Order Details Data

Name	Format	Description
ACTION LIST EXP DATE	DATE	When applicable, this will show the date when the product will expire if the card is not tagged
BRANCH	STRING	Name of branch tied to order
CARD GROUP	STRING	Name of card group tied to order
CARD SERIAL NUMBER	NUMBER	Card serial number tied to product order. If a card range is tied to the order, this field will be NULL.

Name	Format	Description
CSN LIST	TEXT	The first and last CSN that identifies the card range tied to product order. If only one card associated with the order, CSN LIST will contain the same value as CARD SERIAL NUMBER.
CON BILL COMM DATE	DATE	Contract billing commencement date from agreement details
CON COMM DATE	DATE	Contract commencement date from agreement details
CON EXP DATE	DATE	From agreement details
INSTITUTION ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION NAME	STRING	Name of institution tied to agreement details and associated with order
LEAD AGENCY	STRING	From agreement details
ORDER DATE	DATE	Original order date
ORDER NUMBER	NUMBER	Card or product order number generated from the BA Website, Call Center Website, etc.
ORDER STATUS	STRING	Last updated status of order
ORDER STATUS DATE	DATE	Date of last order status update
PARTICIPATING AGENCY	STRING	From agreement details
PAYMENT METHOD	STRING	From agreement details
PAYMENT TERMS	STRING	From agreement details
PRICE	NUMBER	Price associated with each retail product in order
PRODUCT	STRING	Product ordered, if any
PROGRAM	STRING	Program associated with product order
VALIDITY PERIOD	DATE	The month/year associated with any period products

B.8.6   Recovered Revalue

This view is for recording the recovery of a transaction that involved the purchase of electronic value on a card, where the original transaction did not reach the Clearinghouse. Transactions that record the topping off of purse and multi-ride value, the purchase of a new pass or multi-ride product, and the extension of pass product validity may be recovered. Table 151 describes the recovered revalue data elements.

Table 151. Recovered Revalue Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_ID	STRING	The unique ID of the type of the card associated with the transaction.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)

Name	Format	Description
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred
PAYMENT_METHOD_ID	NUMBER	The unique identifier of the payment method used to effect payment for the original purchase. Note that where multiple payment methods were used, the payment method will indicate "multiple."
PAYMENT_METHOD_DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PRODUCT_ID	NUMBER	The ID of the type of product sold.

Name	Format	Description
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_REMAINING_VALUE	NUMBER	Purse value only: The remaining purse value after completion of this transaction.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
REMAINING_RIDES	NUMBER	Multi-ride value only: The remaining number of rides after completion of this transaction.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_AMOUNT	NUMBER	The total amount of the transaction.
TXN_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

Name	Format	Description
V_END_DATE_TIME	DATETIME	The time when the product's validity terminates (i.e., the product becomes invalid at the end of this time). If the product is a Floating Period Pass, this field will be zero.
V_START_DATE_TIME	DATETIME	The time when the product's validity commences (i.e., the product becomes valid at the start of this time). If the product is a Floating Period Pass, this field will be zero.

B.8.7   Revalue Transactions

This view is for transactions that record the purchase of electronic value on a card. This includes topping off purse and multi-ride value, purchase of a new pass or multi-ride product, and the extension of pass product validity.

Table 152 describes the revalue transaction data elements.

Table 152. Revalue Transaction Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_ID	NUMBER	The unique ID of the type of the card associated with the transaction.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the transaction (e.g., Desfire)
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false)
CSN	STRING	The unique identifier - Card Serial Number - of the physical card.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction
EFT_SETTLEMENT_DATE	DATETIME	Credit card payment used only: The settlement date.
EFT_TERMINAL_ID	STRING	Credit card payment used only: The terminal ID.
EFT_TRACE_NUMBER	STRING	Credit card payment used only: The trace number.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD

Name	Format	Description
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
INSTITUTION_ID	NUMBER	The unique identifier of the Institution associated with the card.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false)
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason
LOCAL_DATE_TIME	DATETIME	The local date/time the revalue transaction took place.
NUMBER_OF_PAYMENTS	NUMBER	The number of methods used to effect payment for the purchase.
PAYMENT_METHOD0	NUMBER	The unique identifier of Payment Method 1
PAYMENT_METHOD0_DESC	STRING	The description of the method of payment 1 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD1	NUMBER	If more than one method of payment was used to effect the transaction: The unique identifier of Payment Method 2
PAYMENT_METHOD1_DESC	STRING	The description of the method of payment 2 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_METHOD2	NUMBER	If more than two methods of payment were used to effect the transaction: The unique identifier of Payment Method 3
PAYMENT_METHOD2_DESC	STRING	The description of the method of payment 3 (e.g., cash, check, credit card, purse, etc.).

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Name	Format	Description
PAYMENT_METHOD3	NUMBER	If more than three methods of payment were used to effect the transaction: The unique identifier of Payment Method 4
PAYMENT_METHOD3_DESC	STRING	The description of the method of payment 4 (e.g., cash, check, credit card, purse, etc.).
PAYMENT_VALUE0	NUMBER	The amount paid using Payment Method 1.
PAYMENT_VALUE1	NUMBER	The amount paid using Payment Method 2.
PAYMENT_VALUE2	NUMBER	The amount paid using Payment Method 3.
PAYMENT_VALUE3	NUMBER	The amount paid using Payment Method 4.
PREPAYMENT_PREF	NUMBER	Prepayment (credit card or check) used only: The prepayment reference number.
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer
PRODUCT_SERIAL_NUM	NUMBER	The unique identifier of a product on a card, within the scope of the card. The first product to be added to a card has Product Serial Number = 1, the second 2, etc.
PTSN	NUMBER	Product Transaction Sequence Number - the Product-specific sequence number for the transaction
PURSE_ID	NUMBER	Purse payment used only: The unique ID of the purse.
PURSE_REMAINING_VALUE	NUMBER	Purse value only: The remaining purse value after completion of this transaction.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
REMAINING_RIDES	NUMBER	Multi-ride value only: The remaining number of rides after completion of this transaction.
REVERSED_UDSN	NUMBER	Reversal transactions only: The UDSN of the original transaction being reversed.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.

Name	Format	Description
SERVICE_PART_NAME	STRING	Name of the service participant
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_AMOUNT	NUMBER	The total amount of the transaction.
TXN_DATE_TIME	DATETIME	The calendar date/time on which the transaction occurred.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)
V_END_DATE_TIME	DATETIME	The time when the product's validity terminates (i.e., the product becomes invalid at the end of this time). If the product is a Floating Period Pass, this field will be zero.
V_START_DATE_TIME	DATETIME	The time when the product's validity commences (i.e., the product becomes valid at the start of this time). If the product is a Floating Period Pass, this field will be zero.
VIA_ACTIONLIST	NUMBER	Indicates if the addition of electronic value was effected via actionlisting (1 = true, 0 = false)

B.8.8 Sales Adhoc

This view shows all sales transactions and associated detail. Table 153 describes the sale data elements.

Table 153. Sales Adhoc Data

Name	Format	Description
CARD SERIAL NUMBER	STRING	The unique number associated to the card in which the transaction affected.
DEVICE_ID	NUMBER	When applicable, this will be the device ID associated with device used to perform the sales transaction.
LOAD AGENT	STRING	The name of the participant that made the sale.
LOAD AGENT ID	NUMBER	The unique identifier associated with the participant that made the sale.
OPERATOR_ID	NUMBER	Operator ID associated with login. Currently the Operator CSN for the CST and first initial + last name for websites
OPERATOR_SHIFT NUMBER	STRING	The operator shift ID in which the transaction took place (based on the device).

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Name	Format	Description
PAYMENT AMOUNT	CURRENCY	The amount associated with the payment method of the transaction.
PAYMENT_AUTH_NUMBER	STRING	Merchant credit card authorization number associated with specific payments
PAYMENT METHOD	STRING	The method by which the product sale was affected.
PAYMENT METHOD ID	NUMBER	The ID of the method by which product sales were affected.
PAYMENT_REF_NUMBER	STRING	(check number, money order number, last four digits for credit card or debit card, PO number, voucher number)
PRODUCT	STRING	The product that was sold.
PRODUCT ID	NUMBER	The unique identifier of the type of product sold.
PRODUCT ISSUER	STRING	The name of the agency that issues the product that was sold.
PRODUCT ISSUER ID	NUMBER	The unique identifier associated with the agency that issues the product that was sold.
RECEIPT NUMBER	NUMBER	The receipt number of the sales transaction — used for grouping all line items/payment methods/amounts for a transaction.
RECONCILIATION_DATE	DATE	The reconciliation date of the transactions in the summary.
SALES CHANNEL	STRING	The description of the sales channel through which the products were sold (e.g., Walk-In Center).
SALES LOCATION	STRING	The description of the location at which a product was sold.
SETTLEMENT_DATE	DATE	The date appended to transactions at the clearinghouse
TRANSACTION DATE	DATE	The calendar date on which the transaction was made.
TXN DESCRIPTION	STRING	The type of transaction that was performed (Add-Value, Product Purchase, etc.).
TXN SUBTYPE	NUMBER	The ID of the sub-type of the settled transaction.
TXN TYPE	NUMBER	The ID of the type of the settled transaction.
USER_ID	STRING	User name associated with login - currently first initial + last name

B.8.9   Service Receipt Details

This view is for service receipt details. Table 154 describes the service receipt details data elements.

Table 154. Service Receipt Details Data

Name	Format	Description
PARTICIPANT	STRING	Name of agency that performed the service.

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Name	Format	Description
LOCATION	STRING	Similar to sales location. For example, Lynnwood RideStore, King Street Station, Call Center Website.
PAYMENT METHOD	STRING	Method of payment for fees if any - cash, credit card, check, e-purse, etc.
PRODUCT DESCRIPTION	STRING	Name of product ordered
PRODUCT VALIDITY PERIOD	DATE	The month/year associated with any period products
PURSE REVALUE AMOUNT	NUMBER	Amount of purse ordered for each card
RECEIPT NUMBER	NUMBER	Number associated with receipt generated for zero dollar service performed on behalf of customer.
REMAINING VALUE	NUMBER	Amount of e-purse to transfer to the replacement card after deduction of any fees
SERVICE TYPE	STRING	Configure Autoload, card replacement, refund, issue new card, etc. Data displayed in this field should match what is displayed on the customer receipt.
TXN DATE	DATE	Date/Time of transaction
USER ID	NUMBER	User name associated with login - currently first initial + last name

B.8.10 Transaction Details

This view is for transaction details, used as a basis for financial clearing. Table 155 describes the transaction details data elements.

Table 155. Transaction Details Data

Name	Format	Description
BRANCH DESC	STRING	The description of the branch of the institution for this agreement.
CARD SERIAL NUMBER	NUMBER	The unique serial number associated with, and printed on the card in which the transaction is associated.
DEST PART NAME	STRING	Name of the destination participant
DEST PARTICIPANT ID	NUMBER	The unique identifier of the Agency to which the transactions in the summary are (logically) directed, for the purposes of financial clearing.
DEVICE ID	NUMBER	The unique ID of the device that generated the transactions in the summary.
GFS VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed good for settlement (GFS).
GFS VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed GFS.
INSTITUTION ADDRESS1	STRING	First line of the institution's address

Name	Format	Description
INSTITUTION ADDRESS2	STRING	Second line of the institution's address
INSTITUTION CITY	STRING	Institution City
INSTITUTION ID	NUMBER	Will contain an ID value if the products associated with the transactions in the summary are Institutional products.
INSTITUTION NAME	STRING	The name of the institution
INSTITUTION STATE	STRING	Institution State
INSTITUTION ZIP	STRING	Institution ZIP
LEAD AGENCY ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LOCATION	STRING	Transaction location such as bus number, Lynnwood RideStore, King Street Station, etc.
NGFS VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed not good for settlement (NGFS).
NGFS VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed NGFS.
PAYMENT METHOD DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PAYMENT METHOD ID	NUMBER	The unique identifier of the method of payment on the transactions in the summary.
PRODUCT CATEGORY DESC	STRING	The description of the product category associated with a product
PRODUCT CATEGORY ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT DESC	STRING	The description of the participant's type of product sold
PRODUCT ID	NUMBER	The ID of the type of product sold.
PRODUCT ISSUER ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT ISSUER NAME	STRING	Name of the product issuer
RECON DATE	DATE	The reconciliation date of the transactions in the summary.
SERVICE PART NAME	STRING	Name of the service participant
SERVICE PARTICIPANT ID	NUMBER	The unique identifier of the Agency on whose behalf the transactions in the summary were generated.
SETTLEMENT DATE	DATE	The settlement date of the transactions in the summary.
SOURCE OF TXN	STRING	Call Center, Mail Center, etc.
SOURCE PART NAME	STRING	Name of the source participant

Name	Format	Description
SOURCE PARTICIPANT ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transactions in the summary. This is generally the owner of the device that generated the transactions.
TRANSACTION DATE	DATE	Business date associated with the transaction
TXN DESC	STRING	Description of the transaction, such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	STRING	UDSN associated with the transaction

B.8.11　Transaction Summary

This view is for transaction summaries, used as a basis for financial clearing. Table 156 describes the transaction summary data elements.

Table 156. Transaction Summary Data

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transactions in the summary are (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique ID of the device that generated the transactions in the summary.
GFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed good for settlement (GFS).
GFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed GFS.
INSTITUTION_ID	NUMBER	Will contain an ID value if the products associated with the transactions in the summary are Institutional products.
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement.
INSTITUTION_ADDRESS1	STRING	First line of the institution's address.
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address.
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement.
MGFS_VALUE	NUMBER	The net value of transactions in the summary that – after the validation process – have been deemed not good for settlement (NGFS).

Name	Format	Description
NGFS_VOLUME	NUMBER	The net volume of transactions in the summary that – after the validation process – have been deemed NGFS.
PAYMENT_METHOD_ID	NUMBER	The unique identifier of the method of payment on the transactions in the summary.
PAYMENT_METHOD_DESC	STRING	The description of the method of payment (e.g., cash, check, credit card, purse, etc.).
PRODUCT_ID	NUMBER	The ID of the type of product sold.
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product.
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated.
PRODUCT_DESC	STRING	The description of the participant's type of product sold.
PRODUCT_ISSUER_ID	NUMBER	The ID of the Agency that issues the product that was sold.
PRODUCT_ISSUER_NAME	STRING	Name of the product issuer.
RECON_DATE	DATETIME	The reconciliation date of the transactions in the summary.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transactions in the summary were generated.
SERVICE_PART_NAME	STRING	Name of the service participant.
SETTLEMENT_DATE	DATETIME	The settlement date of the transactions in the summary.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transactions in the summary. This is generally the owner of the device that generated the transactions.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

B.9   Device Events

This section describes the database business views associated with events that occur at a device.

B.9.1   Attempted Logon

This view is for the device event that records an attempted operator logon (successful or unsuccessful) to a device. Table 157 describes the attempted logon data elements.

Table 157. Attempted Logon Data

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
EVENT_TYPE_DESC	STRING	The description of the event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator who attempted to log on to the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.9.2   Device Configuration

This view is for the device notification event that records what CD is currently in a device. Table 158 describes the device configuration data elements.

Table 158. Device Configuration Data

Name	Format	Description
CD_NAME_LIST	STRING	The unique CD payload name.
CD_VERSION_LIST	STRING	The version of the CD set from which this payload was generated.

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
EVENT_TYPE_DESC	STRING	The description of the event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred
LOCATION	NUMBER	The specific location of the device.
LOCATION_TYPE	NUMBER	The unique identifier of the category of location (e.g., BUS STOP, RAILWAY STATION, FERRY DOCK, etc.) of the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it)

B.9.3   Logoff

This view is for the device event that records the logging off of an operator from a device. Table 159 describes the logoff data elements.

Table 159. Logoff Data

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
EVENT_TYPE_DESC	STRING	The description of the event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator who was logged off from the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.9.4   Logon Failure

This view is for the device event that records an operator's failed attempt to log on to a device. Table 160 describes the logon failure data elements.

Table 160. Logon Failure Data

Name	Format	Description
CARD_TYPE_ID	STRING	The unique identifier of the card associated with the failed logon.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the failed logon (e.g., Desfire).

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Name	Format	Description
CSN	NUMBER	The unique Card Serial Number of the physical card associated with the failed logon.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event.
EVENT_TYPE_DESC	STRING	The description of the event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
LOGON_FAIL_REASON_ID	NUMBER	The unique identifier of the reason why the logon attempt failed.
LOGON_FAIL_REASON_DESC	STRING	The description of the logon failure reason (e.g., blocked operator application, invalid PIN).
REPEATED_FAILURE_BLOCK	STRING	Identifies whether or not the operator card is blocked due to repeated logon failures. (Yes/No)
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.9.5   Other Events

This view is for all other events. Table 161 describes the data elements for other events.

Table 161. Other Events Data

Name	Format	Description
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EVENT_TYPE_ID	NUMBER	The unique identifier of the type of event (e.g., incomplete CD, UD storage full, flash memory fault, etc.).
EVENT_TYPE_DESC	STRING	The description of the event.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
LOCATION	NUMBER	The specific location of the device.
LOCATION_TYPE	NUMBER	The unique identifier of the category of location (e.g., BUS STOP, RAILWAY STATION, FERRY DOCK, etc.) of the device.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.9.6   Shift Start/End

This view is for the device event that records an operator's starting/ending a shift at a device. Table 162 describes the shift start/end data elements.

Table 162. Shift Start/End Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CARD_TYPE_ID	STRING	Operator card used to logon the device only: The unique identifier of the type of operator card associated with the logon to the device on which the shift was started.
CARD_TYPE_DESC	STRING	The description of the type of card associated with the shift logon.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false).
CSN	STRING	Operator card used to log on to the device only: The unique Card Serial Number of the operator card associated with the logon to the device on which the shift was started.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false).
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator that started the shift.
OPERATOR_SHIFT_NUMBER	NUMBER	The operator's shift number.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.

Name	Format	Description
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant.
START_END_INDICATOR	NUMBER	An indicator of whether this is the start or end of a shift.
TRANSIT_OPERATOR	STRING	The operator of the transit vehicle. This is understood to either be Community Transit or First Transit when referenced.
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.9.7   Trip Start/End

This view is for the device event that records an operator's starting/ending a trip. Table 163 describes the trip start/end data elements.

Table 163. Trip Start/End Data

Name	Format	Description
BUSINESS_DATE	DATETIME	The business date on which the transaction/event was generated.
CCH_EXCEPTION	NUMBER	An indication of whether the transaction failed a clearing validation (1 = true, 0 = false).
CSN	STRING	Card Serial Number associated with the trip operator.
DEST_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency to which the transaction is (logically) directed, for the purposes of financial clearing.
DEST_PART_NAME	STRING	Name of the destination participant.
DEVICE_ID	NUMBER	The unique identifier of the device. Will contain the value of the Vehicle ID during a device connection event.

Name	Format	Description
DEVICE_SSN	NUMBER	The number of the shift – relative to the device itself – that the device was operating under at the time of the transaction.
EXCEPTION_LIST	STRING	Comma delimited list of validation failures found in the UD.
HOST_NAME	STRING	The unique identifier of the Data Acquisition Computer (DAC) that received this transaction from the device, for subsequent forwarding to an Agency BOC.
ISS_EXCEPTION	NUMBER	An indication of whether the transaction failed an issuer validation (1 = true, 0 = false).
ISSUER_ABORT_REASON_ID	NUMBER	The unique identifier of the reason the transaction failed additional system integrity checking at the point the back-office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason.
LOCAL_DATE_TIME	DATETIME	The calendar date/time on which a transaction occurred.
OPERATOR_ID	STRING	The ID of the operator that started/ended the trip.
OPERATOR_SHIFT_NUMBER	NUMBER	The operator's shift number.
RECONCILIATION_DATE	DATETIME	The reconciliation date for the transaction.
ROUTE_DIRECTION	STRING	The direction in which the trip was started/ended.
ROUTE_ID	NUMBER	The unique identifier of the route variant associated with the trip that was started/ended.
RUN_ID	NUMBER	The run number (block number) for the trip that was started/ended.
SAM_ID	NUMBER	The unique identifier of the security module installed in a device.
SERVICE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency on whose behalf the transaction was generated. This is generally the Agency that will participate in any financial clearing of the transaction.
SERVICE_PART_NAME	STRING	Name of the service participant.
SETTLEMENT_DATE	DATETIME	The settlement date for the transaction.
SOURCE_PARTICIPANT_ID	NUMBER	The unique identifier of the Agency that was responsible for generating the transaction/event. This is generally the owner of the device that generated the transaction/event.
SOURCE_PART_NAME	STRING	Name of the source participant.

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Name	Format	Description
TRANSIT_OPERATOR	STRING	The operator of the vehicle.
TRIP_ID	NUMBER	Unique identifier of the trip that was started/ended.
TRIP_START_END_INDICATOR	NUMBER	An indicator of whether this is the start or end of a trip. (START/END)
TXN_DESC	STRING	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.
UDSN	NUMBER	The Unique Device Sequence Number (UDSN) (the sequence number of the transaction/event, relative to the device that generated it).

B.10 Institutional

This section describes the database business views associated with specific items of Institutional data.

B.10.1 Institutional Billing

This view is for the Institutional Billing data that identifies the information needed in order to accurately perform monthly billing. Table 164 describes the Institutional Billing data elements.

Table 164. Institutional Billing Data

Name	Format	Description
BILLING MMYY	DATE	The Month/Year that indicates the month being billed.
BILLING TYPE	STRING	The billing type associated with the invoice to the institution for right to ride program usage.
BRANCH DESC	STRING	Name of branch tied to transaction
CARD COUNT	NUMBER	The number of cards used on the transaction date.
CARD GROUP	STRING	Name of card group tied to transaction
CARD SERIAL NUMBER	NUMBER	The unique serial number associated with, and printed on the card in which the transaction is associated.
DELIVERY METHOD	STRING	Remote or Automatic delivery of the transaction. (not applicable to R2R transactions)
INSTITUTION ID	NUMBER	The unique identifier of the institution
INSTITUTION NAME	STRING	The name of the institution
LEAD AGENCY ID	NUMBER	The Lead Agency associated with the Institutional agreement.
LEAD AGENCY NAME	STRING	The name of the Lead Agency associated with the Institutional Agreement.

Name	Format	Description
ORDER NUMBER	NUMBER	Card or product order number generated from the BA Website
PRODUCT DESC	STRING	The description of the participant's type of product sold
PROGRAM TYPE DESC	STRING	Description of the product: Right-to-Right, Vouchers, Customized Programs, or Commercial Account Programs
PROGRAM TYPE ID	NUMBER	The unique identifier to the applicable program type associated with the transaction.
REDEEMED	STRING	Yes or No value to indicate if the product has been redeemed. (not applicable to R2R transactions)
TXN AMOUNT	NUMBER	The actual transaction amount (prior to apportionment)
TXN COUNT	NUMBER	The count of actual transactions on the transaction date
TXN DATE	DATE	The calendar date of the transaction

B.10.2   Institutions CRM

This view is for the Institutional CRM data that identifies Institutional contract details. Table 165 describes the Institutions CRM data elements.

Table 165. Institutions CRM Data

Name	Format	Description
ACCOUNT STATUS DATE	DATE	Date of last account status update
AGREEMENT TYPE	STRING	Manual or Online
BRANCH	STRING	Name of branch tied to order
CONTRACT BILLING COMM DATE	DATE	Contract billing commencement date from agreement details
CONTRACT COMM DATE	DATE	Contract commencement date from agreement details
CONTRACT EXPIRATION DATE	DATE	From agreement details
DATE APPROVED	DATE	Date order approved by lead agency
INSTITUTION CONTACT NAME	STRING	From agreement details
INSTITUTION CONTACT PHONE	STRING	From agreement details
INSTITUTION ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION NAME	STRING	Name of institution tied to agreement details and associated with order
INSTITUTION STATUS	STRING	Current account status
LEAD AGENCY ID	NUMBER	Unique identifier of the lead agency associated with the agreement.

Name	Format	Description
LEAD AGENCY	STRING	Lead agency name
LEAD AGENCY CONTACT NAME	STRING	From agreement details
PROGRAM	STRING	Program associated with product order
PROGRAM CATEGORY	STRING	Campus, Employer, or Human Services

B.10.3 Institution Orders

This view is for Institutional order data. Table 166 describes the Institution Order data elements.

Table 166. Institution Orders Data

Name	Format	Description
BRANCH	STRING	Name of branch tied to order
INSTITUTION ID	NUMBER	Unique system generated number provided during account set up
INSTITUTION NAME	STRING	Name of institution tied to agreement details and associated with order
LEAD AGENCY ID	NUMBER	Unique identifier of the lead agency associated with the agreement.
LEAD AGENCY	STRING	Lead agency name
ORDER DATE	DATE	Original order date
ORDER NUMBER	NUMBER	Product order number or card order number
ORDER STATUS	STRING	Last updated status of order
ORDER STATUS DATE	DATE	Date of last order status update

B.11 Configuration Data

This section describes the database business views associated with specific items of CD. This data is used to support the translation of coded information in the other data structures, by providing descriptions against each code. To keep exported data volumes to a minimum, CD will be exported only when its associated data has been modified.

B.11.1 Abort Reason Lookup

This view is for mapping IssuerAbortReason unique identifiers to the description of the failed integrity check. Table 167 describes the abort reason data elements.

Table 167. Abort Reason Data

Name	Format	Description
ABORT_REASON_ID	NUMBER	The unique identifier of any reason why the transaction failed additional system integrity checking at the point the back office representation of the card, transit application, or product was being updated from the transaction.
ABORT_REASON_DESC	STRING	The description of the unique abort reason.

B.11.2 Account Lookup

This view is for mapping unique identifiers to the description of a settlement account. Table 168 describes the account lookup data elements.

Table 168. Account Lookup Data

Name	Format	Description
ACCOUNT_ID	NUMBER	The unique settlement account number
ACCOUNT_TYPE_DESC	STRING	The description of the type of settlement account
ACCOUNT_TYPE_ID	NUMBER	The unique identifier of the type of settlement account
PARTICIPANT_ID	NUMBER	The participant associated with the settlement account

B.11.3 Adjustment Reason Lookup

This view is for mapping ManualAdjustmentReason unique identifiers to the description of the logon failure reason. Table 169 describes the manual adjustment reason data elements.

Table 169. Adjustment Reason Data

Name	Format	Description
ADJUSTMENT_REASON	STRING	A 3-character value representing the reason for adjustment
ADJUSTMENT_REASON_DESC	STRING	The description of the reason for adjustment

B.11.4 Card Type Lookup

This view is for mapping unique identifiers to the description of a card type. Table 170 describes the card type lookup data elements.

Table 170. Card Type Lookup Data

Name	Format	Description
CARD_TYPE_DESC	STRING	The description of the type of card (e.g., Desfire)
CARD_TYPE_ID	NUMBER	The unique identifier of the card type

B.11.5 Cardholder Lookup

This view is for mapping unique identifiers to the description of cardholders. Table 171 describes the cardholder lookup data elements.

Table 171. Cardholder Lookup Data

Name	Format	Description
CARDHOLDER_ADDRESS1	STRING	First line of the cardholder's address. Will be BLANK if an anonymous card.

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Name	Format	Description
CARDHOLDER_ADDRESS2	STRING	Second line of the cardholder's address. Will be BLANK if an anonymous card.
CARDHOLDER_CITY	STRING	Cardholder City. Will be BLANK if an anonymous card.
CARDHOLDER_FIRSTNAME	STRING	The first name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_ID	NUMBER	The unique Identifier for a cardholder.
CARDHOLDER_LASTNAME	STRING	The last name of the cardholder linked to this card. Will say UNLINKED if it is an anonymous card.
CARDHOLDER_STATE	STRING	Cardholder State. Will be BLANK if an anonymous card.
CARDHOLDER_ZIP	STRING	Cardholder ZIP. Will be BLANK if an anonymous card.

B.11.6 Claim Status Lookup

This view is for mapping unique identifiers to the description of claim status. Table 172 describes the claim status lookup data elements.

Table 172. Claim Status Lookup Data

Name	Format	Description
CLAIM_STATUS_DESC	STRING	The description of the claim status (e.g., Pending).
CLAIM_STATUS_ID	NUMBER	The unique identifier associated with the claim status.

B.11.7 Event Type Lookup

This view is for mapping EventType unique identifiers to the description of the event. Table 173 describes the event type data elements.

Table 173. Event Type Data

Name	Format	Description
EVENT_TYPE_ID	NUMBER	The unique identifier of an event type.
EVENT_TYPE_DESC	STRING	The description of the event.

B.11.8 Institution Lookup

This view is for mapping unique identifiers to the description of Institutions. Table 174 describes the Institution lookup data elements.

Table 174. Institution Lookup Data

Name	Format	Description
BRANCH_DESC	NUMBER	The description of the branch of the institution for this agreement

Name	Format	Description
INSTITUTION_ADDRESS1	STRING	First line of the institution's address
INSTITUTION_ADDRESS2	STRING	Second line of the institution's address
INSTITUTION_CITY	STRING	Institution City
INSTITUTION_ID	NUMBER	The unique identifier of the institution
INSTITUTION_NAME	STRING	The name of the institution
INSTITUTION_STATE	STRING	Institution State
INSTITUTION_ZIP	STRING	Institution ZIP
LEAD_AGENCY_ID	NUMBER	The Lead Agency associated with the Institutional agreement
LEAD_AGENCY_NAME	STRING	The name of the Lead Agency associated with the Institutional agreement

B.11.9　Logoff Method Lookup

This view is for mapping LogoffMethod unique identifiers to the description of the logoff method. Table 175 describes the logoff method data elements.

Table 175. Logoff Method Data

Name	Format	Description
LOGOFF_METHOD_ID	NUMBER	The unique identifier of a method by which an operator was logged off.
LOGOFF_METHOD_DESC	STRING	The description of the logoff method.

B.11.10　Logon Failure Reason Lookup

This view is for mapping LogonFailureReason unique identifiers to the description of the logon failure reason. Table 176 describes the logon failure reason data elements.

Table 176. Logon Failure Reason Data

Name	Format	Description
LOGON_FAILURE_REASON_ID	NUMBER	The unique identifier of a reason why a logon attempt failed.
LOGON_FAILURE_REASON_DESC	STRING	The description of the logon failure reason.

B.11.11　Non-Fare Card Event Type Lookup

This view is for mapping NonFareCardEvent unique identifiers to the description of the non-fare card event. Table 177 describes the non-fare card event type data elements.

Table 177. Non-Fare Card Ridership Event Type Data

Name	Format	Description
COUNTER_DESC	STRING	The description of the counter associated with the event (e.g., Bicycle, Adult Full Fare, etc.)

Name	Format	Description
COUNTER_ID	NUMBER	The unique ID associated to each counter description
SERVICE_PARTICIPANT_NAME	STRING	The Agency associated with the event – associated with the counter
RIDERSHIP	NUMBER	Identifies whether or not the counter is a Ridership statistic (1) or Informational (0)
SERVICE_PARTICIPANT_ID	NUMBER	The unique ID associated with the Service Participant (agency) associated with the counter and event

B.11.12 Participant Lookup

This view is for mapping all participants within the RFCS using participant-unique identifiers to the name of the participant. These participants can be Service Participants, Source Participants, Lead Agency, Product Issuers, etc. Table 178 describes the participant data elements.

Table 178. Participant Name Data

Name	Format	Description
PARTICIPANT_ID	NUMBER	ID of the participant
PARTICIPANT_NAME	STRING	Name of the participant

B.11.13 Passenger Type Lookup

This view is for mapping PassengerType unique identifiers to the description of the passenger type. Table 179 describes the passenger type data elements.

Table 179. Passenger Type Data

Name	Format	Description
PASSENGER_TYPE_ID	NUMBER	ID of the passenger type
PASSENGER_TYPE_DESC	STRING	The description of the passenger type

B.11.14 Payment Method Lookup

This view is for mapping PaymentMethod unique identifiers to the description of the payment method. Table 180 describes the payment method data elements.

Table 180. Payment Method Data

Name	Format	Description
PAYMENT_METHOD_ID	NUMBER	The ID of the method by which product sales were affected.
PAYMENT_METHOD_DESC	STRING	The description of the method by which product sales were affected.

B.11.15 Product Type Lookup

This view is for mapping ProductType unique identifiers to the name of the product. Table 181 describes the product type data elements.

Table 181. Product Type Data

Name	Format	Description
PARTICIPANT_ID	NUMBER	The ID of the Agency that issues the product that was sold
PRODUCT_CATEGORY_DESC	STRING	The description of the product category associated with a product
PRODUCT_CATEGORY_ID	NUMBER	The ID of the category for which the product is associated
PRODUCT_DESC	STRING	The description of the participant's type of product sold
PRODUCT_ID	NUMBER	The ID of the product type that was sold

B.11.16 Recredit Reason Lookup

This view is for mapping RecreditReason unique identifiers to the description of the recredit reason. Table 182 describes the recredit reason data elements.

Table 182. Recredit Reason Data

Name	Format	Description
RECREDIT_REASON_ID	NUMBER	The unique identifier of a recredit reason.
RECREDIT_REASON_DESC	STRING	The description of the recredit reason.

B.11.17 Transaction Description Lookup

This view is for mapping TxnType and TxnSubtype unique identifiers to a text description of the transaction. Table 183 describes the transaction description data elements.

Table 183. Transaction Name Data

Name	Format	Description
TXN_DESC	STRING	Unique ID of the type of transaction
TXN_SUBTYPE	NUMBER	Unique ID of the sub-type of transaction
TXN_TYPE	NUMBER	Description of the transaction such as Purse Sales, Purse Fare Payment, Manual Adjustment, etc.

B.11.18 Vehicle Type Lookup

This view is for mapping VehicleType unique identifiers to the description of the vehicle type. Table 184 describes the vehicle type data elements.

Table 184. Vehicle Type Data

Name	Format	Description
VEHICLE_TYPE_ID	NUMBER	The unique identifier of a vehicle type.
VEHICLE_TYPE_DESC	STRING	The description of the vehicle type.

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Appendix C Acronyms, Abbreviations, and Terms

C.1   Acronyms and Abbreviations

Table 185 contains the acronyms and abbreviations that are specific to ERG Transit Systems (USA), Inc. (ERG). In general, industry-standard acronyms and abbreviations are not defined in this table.

Table 185. Acronyms and Abbreviations

Acronym or Abbreviation	Definition
CD	Configuration Data
CE	Crystal Enterprise™
CRE	Crystal Reports Explorer™
CRM	Customer Relationship Management
CSR	Customer Service Representative
CST	Customer Service Terminal
ERG	ERG Transit Systems (USA), Inc.
ESB	ERG Service Bureau
NTD	National Transit Database
OFS	Offline Server
ORCA	One Regional Card for All
RFCS	Regional Fare Coordination System
UD	Usage Data

C.2   Terms

Table 186 contains the terms that are specific to ERG. In general, industry-standard terms are not defined in this table.

Table 186. Terms

Term	Definition
Ad Hoc Report	A query that users define and write to obtain data to meet a specific need.
Agency	Each of the public transportation agencies that are a party to the RFCS agreement.
Call Center	A central physical location that receives and responds to customer service inquiries regarding the RFCS.
Configuration Data	A generic term for data that is sent to a device or host to configure its functionality.
Customer Service	A generic term for the functions that assist customers with transit and smart card-related issues. Customer service inquiries can be made through numerous channels, such as the website, Walk-In Centers, over the phone, or by mail.
Instance (within CE)	A single generation of a report that (if successful) contains data from the time from which the report was run.

Term	Definition
Object (within CE)	Objects reside within Crystal Enterprise. Objects can be reports, folders, programs, Microsoft Excel files, Microsoft Word files, Microsoft PowerPoint files, Adobe Acrobat files, rich text format files, text files, hyperlinks, as well as object packages, which consist of reports and/or program objects.
Regional Fare Coordination System	All systems, equipment and work to be provided to (a) transportation Agencies under the Contract and (b) other providers of public transportation within the region as may be added to the RFCS either by a contract amendment or by separate contract with the contractor and approved by the Agencies. Said work includes but is not limited to the collection and processing of data related to the transit fares and other fees for government services provided by the Agencies or other providers of public transportation within the region.
Usage Data	A generic term for data that is generated when a transaction or event occurs. For example, a transaction record is a type of usage data.

Appendix D List of Tables and Figures

D.1   List of Tables

D.2   List of Figures

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Appendix E References

The following materials are to be used in conjunction with or are referenced by this document.

[1]   Contract 229944, as amended and conformed

[2]   SEA-00093 Required Manuals Schedule (CDRL 33)

[3]   SEA-01043 Seattle Central Glossary

[4]   SEA-00833 RFCS Reporting Requirements (DR 111)

Appendix F Document History

Revision	Revision Date	Reason for Issue	Author
0.1	4 Aug 2008	Initial Draft	Amber Smith
0.2	4 Aug 2008	Second draft (first was corrupted?)	Amber Smith
0.3	19 Oct 2008	Edit/format for submission	Stephen Lynch
1.0	27 Oct 2008	Release to Customer - Release 4 Trng - ERG Submits [SEA300850]	Rose Fallaw
1.1	1 Dec 2008	Responses to Agency comments	Chandra Kothamasu
1.2	3 Dec 2008	Edit for submittal	Leigh Alexander
2.0	5 Dec 2008	Release to Customer	Rose Fallaw
2.1	27 May 2009	Cleaned up comments and tracked changes that predate NAC SEA-05185, dated 20Mar09	Steve Stone
2.2	7 Dec 2009	Updated As Built	Amber Smith
2.3	18 Dec 2009	Edit for As Built Update CR-002363	Joan Bayer
3.0	11 Jan 2010	Release to Customer	Rose Fallaw